XR-FA500

SERVICE MANUAL

Ver 1.2 2003. 07

AEP Model
UK Model
E Model
Australian Model

- XR-FA500 is composed of following models.
  As for the service manual, it is issued for each component model, then, please refer to them.

COMPONENT MODEL NAME

	XR-FA500
COMPACT DISC DECK RECEIVER SYSTEM	CX-LFA500
SPEAKER SYSTEM	SX-LFA500

PARTS LIST

Part No.	Descriptio	Remark
	ACCESSORIES	
	**********	
1-477-914-11	COMMANDER, STANDARD (RM-Z20020)	
1-501-374-92	ANTENNA, LOOP (AM)	
⚠ 1-569-008-12	ADAPTOR, CONVERSION 2P (E51)	
1-754-255-11	ANTENNA (FM) (E51)	
1-793-184-21	CONNECTOR (F TYPE ADAPTOR)(FM ANTENNA)	
4-247-459-11	MANUAL, INSTRUCTION (ENGLISH, SPANISH, GERMAN, FRENCH, ITALIAN, RUSSIAN, POLISH, HUNGARIAN, CZECH)(AEP)	
4-247-459-21	MANUAL, INSTRUCTION (ENGLISH)(UK)	
4-249-131-01	COVER BATTERY (FOR RM-Z20020)	
4-247-459-41	MANUAL, INSTRUCTION (ENGLISH, SPANISH, FRENCH, TRADITIONAL CHINESE) (SP)	
4-247-459-51	MANUAL, INSTRUCTION (ENGLISH) (AUS)	
4-247-459-61	MANUAL, INSTRUCTION (ENGLISH, SPANISH) (E51)	
4-247-792-01	CORD, SPEAKER	
4-249-043-01	FOOT (FOR SPEAKERS)	
4-249-457-11	MANUAL, INSTRUCTION (ENGLISH, TRADITIONAL CHINESE) (TW)	
4-249-457-21	MANUAL, INSTRUCTION (KOREAN) (KR)	

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

- Abbreviation
  AUS : Australian model.
  E51 : Chilean and Peruvian models.
  KR : Korean model.
  SP : Singapore model.
  TW : Taiwan model.

MICRO HI-FI COMPONENT SYSTEM

9-877-149-03
2003G16-1
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Home Audio Company
Published by Sony Engineering Corporation

http://getMANUAL.com

CX-LFAV500

SERVICE MANUAL

E Model

Ver 1.0 2003. 08

CX-LFAV500 is the Amplifier, Video CD/CD player, Tape Deck and Tuner section in XR-FAV500.

CD Section	Model Name Using Similar Mechanism	NEW
	CD Mechanism Type	CDM55A-30BD61S
	Base Unit Name	BU-30BD61S
	Optical Pick-up Name	A-MAX.3
TAPE Section	Model Name Using Similar Mechanism	CX-LFA500
	Tape Transport Mechanism Type	CMAL1Z222B

SPECIFICATIONS

TUNER

FM tuning range	87.5 MHz to 108 MHz
FM usable sensitivity (IHF)	16.8 dBf
FM antenna terminal	75 Ω (unbalanced)
AM tuning range	531 kHz to 1602 kHz (9 kHz step) 530 kHz to 1710 kHz (10 kHz)
AM usable sensitivity	350 μV/m
AM antenna	Loop antenna

AMPLIFIER

Power output	Rated: 16 W + 16 W(1 kHz, T.H.D. 1 %, 6 Ω) Reference: 20 W + 20 W(1 kHz, T.H.D. 10 %, 6 Ω)
Inputs	AUX IN: 500 mV MIC: 1.0 mV (10 kΩ)
Outputs	SPEAKERS: 6 Ω or more PHONES: 32 Ω or more

CASSETTE DECK

Track format	4 tracks, 2 channels stereo
Frequency response	100 Hz – 10000 Hz
Recording system	AC bias
Heads	Recording/playback × 1, erase × 1

CD PLAYER

Laser	Semiconductor laser (λ = 780 nm) Emission duration: continuous
D/A converter	1 bit dual
Signal-to-noise ratio	80 dB (1 kHz, 0 dB)
Wow and flutter	Unmeasurable
Video data	MPEG 1
Audio data	MPEG 1, Layer 2 (VCD) MPEG 1, Layer 3 (MP3-CD)

GENERAL

Power requirements	120 V/220 V/230-240 V AC (Switchable), 50/60 Hz
Power consumption	55 W
Power consumption in standby mode	
	with ECO mode on: 0.3 W with ECO mode off: 10 W
Dimensions (w/h/d)	Approx. 190 × 250 × 284 mm
Mass	Approx. 4.5 kg
Supplied accessories:	FM antenna (1) AM antenna (1) Speaker cords (2) Remote commander (1) Video connecting cord (1) Batteries (2) Speaker pads (8)

Specifications and external appearance are subject to change without notice.

MICRO HI-FI COMPONENT SYSTEM

9-961-145-01
2003H1678-1
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SECTION 1
SERVICING NOTES

Notes on chip component replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

Flexible Circuit Board Repairing

- Keep the temperature of the soldering iron around 270 ˚C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

UNLEADED SOLDER

Boards requiring use of unleaded solder are printed with the lead-free mark (LF) indicating the solder contains no lead.
(Caution: Some printed circuit boards may not come printed with the lead free mark due to their particular size)

: LEAD FREE MARK

Unleaded solder has the following characteristics.

- Unleaded solder melts at a temperature about 40 ˚C higher than ordinary solder.
  Ordinary soldering irons can be used but the iron tip has to be applied to the solder joint for a slightly longer time.
  Soldering irons using a temperature regulator should be set to about 350 ˚C .
  Caution: The printed pattern (copper foil) may peel away if the heated tip is applied for too long, so be careful!
- Strong viscosity
  Unleaded solder is more viscous (sticky, less prone to flow) than ordinary solder so use caution not to let solder bridges occur such as on IC pins, etc.
- Usable with ordinary solder
  It is best to use only unleaded solder but unleaded solder may also be added to ordinary solder.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

CAUTION
Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

The following caution label is located inside the apparatus.

CAUTION : INVISIBLE LASER RADIATION WHEN OPEN AND INTERLOCKS DEFEATED. AVOID EXPOSURE TO BEAM.
ADVARSEL : USYNLIG LASERSTRÅLING VED ÅBNING NÅR SIKKERHEDSAFBRYDERE ER UDE AF FUNKTION. UNDGÅ UDSAETTELSE FOR STRÅLING.
VORSICHT : UNSICHTBARE LASERSTRAHLUNG. WENN ABDECKUNG GEÖFFNET UND SICHEREITSVERRIEGELUNG ÜBERBRÜCKT. NICHT DEM STRAHL AUSSETZEN.
VARO! : AVATTAESSA JA SUOJALUKITUS OHITETTAESSA OLET ALTTIINA NÄKYMÄTTÖMÄLLE LASERSÄTEILYLLE. ÄLÄ KATSO SÄTEESEEN.
VARNING : OSYNLING LASERSTRÅLING NÄR DENNA DEL ÄR ÖPPNAD OCH SPÄRREN ÄR URKOPPLAD. BETRAKTA EJ STRÅLEN.
ADVERSEL : USYNLIG LASERSTRÅLING NÅR DEKSEL ÅPNES OG SIKKERHEDSLÅS BRYTES. UNNGÅ EKSPONERING FOR STRÅLEN.
VIGYAZAT! : A BURKOLAT NYITÁSAKOR LÁTHATATLAN LÉZERSUGÁRVESZÉLY! KERÜLJE A BESUGÁRZÁST!

This appliance is classified as a CLASS 1 LASER product. The CLASS 1 LASER PRODUCT MARKING is located on the exterior.

Laser component in this product is capable of emitting radiation exceeding the limit for Class 1.

NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic break-down because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body.
During repair, pay attention to electrostatic break-down and also use the procedure in the printed matter which is included in the repair parts.
The flexible board is easily damaged and should be handled with care.

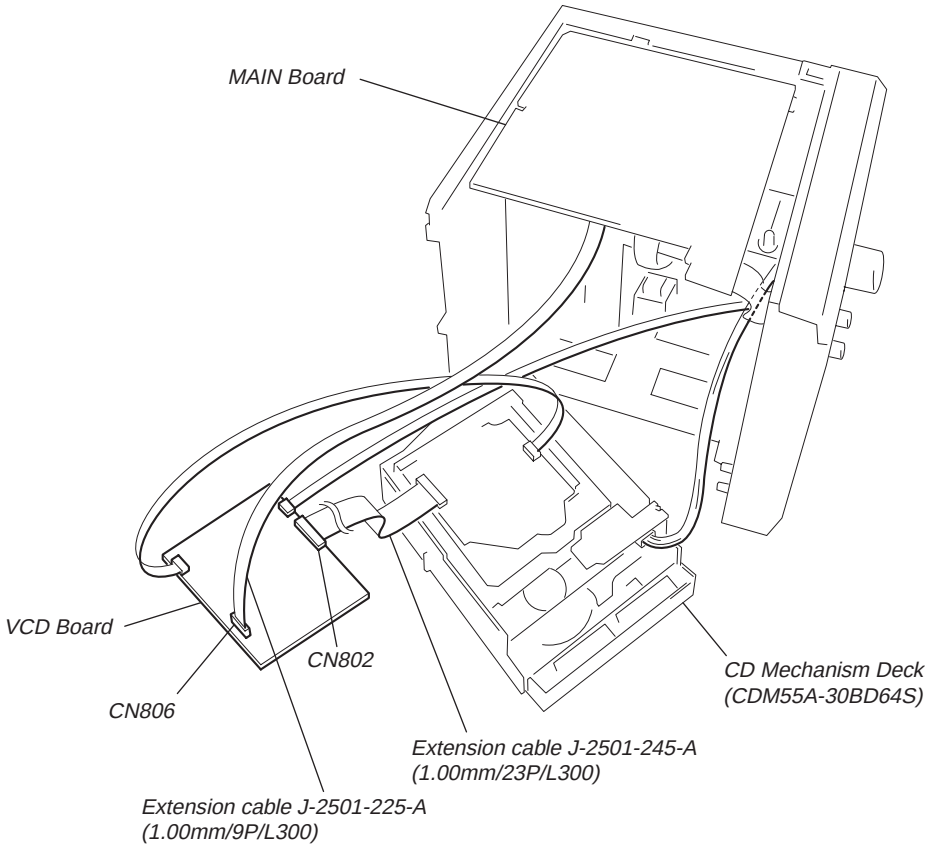
NOTES ON LASER DIODE EMISSION CHECK

The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe from more than 30 cm away from the objective lens.

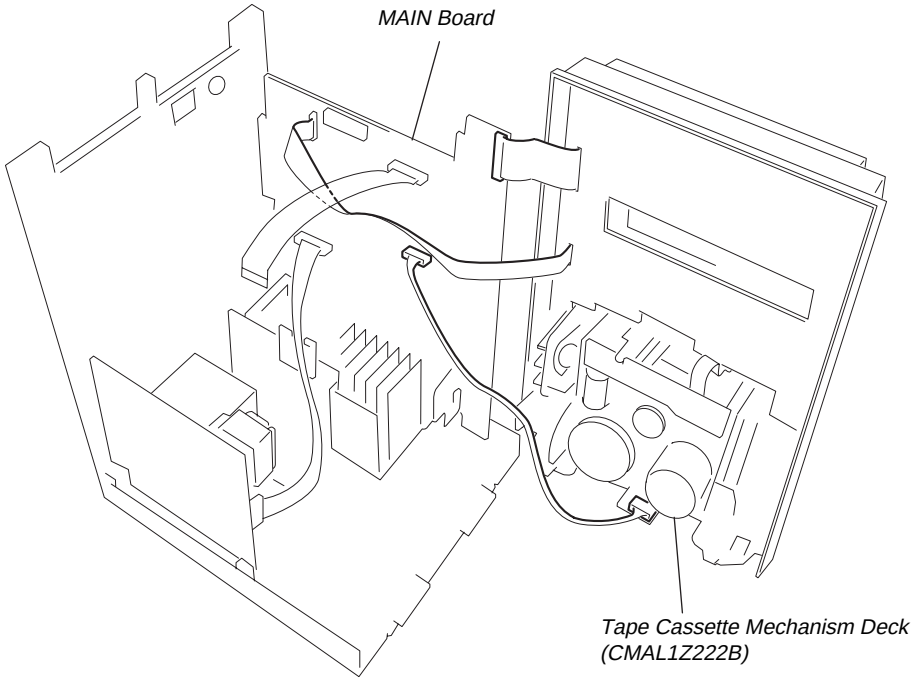
LASER DIODE AND FOCUS SEARCH OPERATION CHECK

Carry out the “S curve check” in “CD section adjustment” and check that the S curve waveforms is output three times.

Service Position of the CD Mechanism Deck and VCD Board



Service Position of the Tape Cassette Mechanism Deck



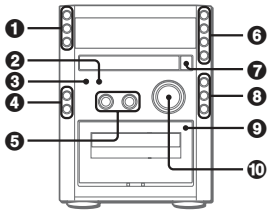
SECTION 2
GENERAL

This section is extracted from instruction manual.

PARTS AND CONTROLS

Main unit: front

Refer to the pages indicated in parentheses for details.



❶ **POWER ⏻STANDBY/ON (8)**
Switches the unit on and off (standby).

ECO (8)
Sets the ECO mode on or off.

DISPLAY (10, 14)
Changes the display in CD playback mode.

❷ **MIC jack**
Plug in an optional microphone with a stereo mini plug (ø3.5 mm).

❸ **PHONES jack**
Plug in optional headphones set with a stereo mini plug (ø3.5 mm). Speaker output is cancelled.

❹ **SYNCHRO REC (19)**
Starts recording and CD play simultaneously.

●REC START/REC PAUSE (19)
Starts and pauses recording.

❺ **BASS (9)**
Adjusts the bass level.

TREBLE (9)
Adjusts the treble level.

❻ **▶❚❚CD/SELECT (8, 10-14)**
Starts and pauses CD play.

TUNER/BAND (8, 16)
Selects tuner function and the tuner band.

◀▶TAPE (REC MUTING) (8, 18, 19)
Starts playback and changes the playback side.
Also used to enter 4-second blank spaces during recording.

AUX (8)
Selects the function of external equipment connected to AUX IN jacks.

❼ **⏏OPEN/CLOSE (10)**
Opens or closes the disc compartment.

❽ **■/CLEAR/ ↶RETURN (10-14, 18, 19)**
CD and Tape: stops playback.

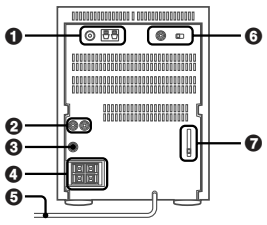
◀◀/I◀◀—PREVIOUS, NEXT+▶▶I/▶▶ (8-10, 12-14, 16, 18, 20-23)
CD: skips to a previous or a succeeding track when pressed, searches a track in fast forward or reverse playback when held down.
Tape: rewinds or fast forwards the tape.
Tuner: manually tunes up or down within the band.

❾ **⏏PUSH EJECT (18, 19)**
Opens or closes the cassette holder.

❿ **VOLUME (9, 22)**
Adjusts the volume.

Main unit: rear

Refer to the pages indicated in parentheses for details.



❶ **AM LOOP terminal and FM 75Ω terminal (4)**
Plug in the supplied AM and FM antennas.

❷ **AUX IN jacks**
Accept analogue sound signals from external equipment. Connect external equipment using an optional connecting cable with RCA phono plugs (red plug to R jack, white plug to L jack). Refer also to the operating instructions for your equipment.
To switch function to external input, press AUX.
To change a source name in the display of the AUX function
Hold down AUX and press POWER while the power is on.

→ AUX → VIDEO → TV →

❸ **SUB WOOFER jack**
Connect optional powered sub woofer with a built-in amplifier to the jack.

❹ **SPEAKERS terminals (4)**
Connect the speaker cords of the supplied speakers.

❺ **AC power cord (4)**

❻ **VIDEO OUT jack (4)**
Outputs video signals.
Connect to the video input jack of your TV set with the supplied video connecting cord. Select the appropriate video input on your TV. Refer to the operating instructions of your TV.

NTSC/AUTO/PAL switch (4)
Sets the color system of the video signal output via the VIDEO OUT jack. Turn off the power, and then set the switch according to your TV set:

- NTSC: When connecting to an NTSC system TV.
- AUTO: When connecting to a multi color system TV.
- PAL: When connecting to a PAL system TV.

• In case of setting the switch to "AUTO", you need to adjust the color system according to your VCD to play back. Hold down SHIFT and SLOW for about 6 seconds in stop mode in CD function, and "PAL" (initial) or "NTSC" appears on the display (except when the loaded disc is MP3-CD).

When playing back a PAL VCD, hold down SHIFT and SLOW and then release them when "PAL" appears. When playing back an NTSC VCD, do the same procedure and release it when "NTSC" appears.

When the function is changed or the unit is turned off, PAL is restored.

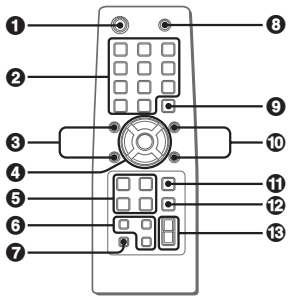
• This unit does not support color system other than PAL and NTSC, such as NTSC 4.43 or SECAM.

• If there is a color or picture trouble in the AUTO mode, select NTSC or PAL.

❼ **AC VOLTAGE selector (3)**
Switches AC voltage between 120V, 220 and 230-240V.
Make sure it matches your local voltage.

Remote commander

Refer to the pages indicated in parentheses for details.



Buttons with the same or similar names on the main unit basically have the same function.

❶ **POWER (8)**

❷ **1–10/0, >10 (10-14,16)**
CD: selects a track of the specified number.
Tuner: tunes in the station with the specified preset number.

The numbered buttons take on these functions when pressed with SHIFT held down:

CLOCK (8)
Selects clock mode.

TIMER (22, 23)
Selects timer mode.

SLEEP (22)
Selects sleep-timer mode.

TUNER MODE (17)
Switches between stereo or monaural FM reception.

REV MODE (17, 18, 22)
Selects a reverse mode.

SHUF/PROGRAM (10, 11, 21)
Selects shuffle or programmed CD playback mode.

REPEAT (10)
Selects repeat CD playback mode.

DIMMER (8)
Adjusts the display window brightness.

CHECK (21)
Check the tracks during Karaoke program.

❸ **ZOOM (12)**
Enlarge VCD picture during pause.

MIC/ECHO (20, 21)
MIC: adjust the microphone volume.
ECHO: adjust the echo level.

SLOW / KEY CONTROL (12, 21)
SLOW: play back a VCD slowly while held down.
KEY CONTROL: adjust the key level.

❹ **ALBUM/PRESET ∧, ∨ (14, 16)**
MP3-CD:skips to a previous or succeeding album.
Tuner: Tunes in a preset station.

◄◄/I◄◄,►►I/►► (8-10, 12-14, 16, 18, 20-23)

ENTER/SELECT (8, 16, 22, 23)
Determines the mode.
Stores the received station to preset.

❺ **►IICD (8, 10-14)**

◄►TAPE (8, 18)

TUNER/BAND (8, 16)

ON SCREEN / PBC (12, 13)
ON SCREEN: displays disc information such as elapsed tiime on TV screen.
PBC: turns the PBC function on and off.

❻ **DISPLAY (10, 14)**
Changes the display in CD playback mode.

DIGEST (13)
Activates the Digest playback function.

MARK (13)
Marks a desired point when playing a VCD.

❼ **SHIFT**
Hold down when pressing a numbered button to change its function to that printed above the number.

❽ **MUTING (9)**
To turn off the sound temporarily.

❾ **CLEAR (11, 16, 22, 23)**
CD: clears a CD program
Tuner: clears a preset station.

❿ **KARAOKE (20)**
Activates and selects karaoke mode.

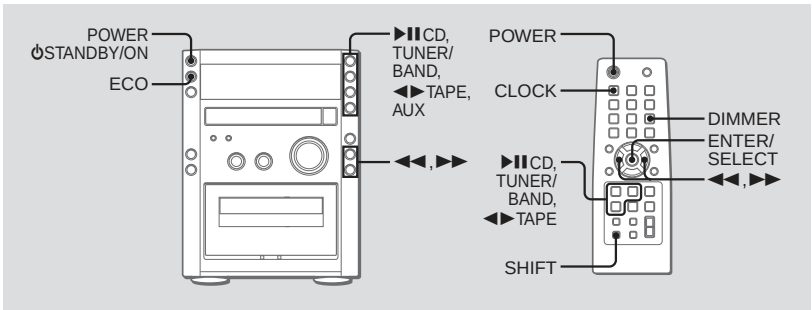
TONE (9)
Selects the bass or treble adjusting mode.

⓫ **■/↶RETURN (10-14, 18, 19)**

⓬ **FUNCTION (19)**
Switches the active function among TAPE, TUNER, AUX (VIDEO or TV) and CD.

⓭ **VOLUME +,– (9)**

ADJUSTMENTS BEFORE OPERATION



Power

Turning the unit on
Press POWER ⏻STANDBY/ON (POWER on the remote). Alternatively, press ◄► TAPE, TUNER/BAND, AUX or ►II CD. Playback will start automatically if a disc or tape is loaded.

Turning the unit off
Press POWER ⏻STANDBY/ON again.
The unit goes into standby.

Dimmer

The display window brightness can be selected.

Hold down SHIFT and press DIMMER on the remote repeatedly.
Each press of the button changes the following three levels: "DIMMER 1", "DIMMER 2" and "DIMMER 0". "DIMMER 0" is brightest.

ECO mode

Reduces power consumption in standby mode with the following operations.

Press ECO.
Each press of the button changes the mode as follows;

ECO ON: Power economizing mode is activated.
When the unit turns off, everything in the display disappears and only the red indicator on POWER lights to show that the power is being supplied.
ECO OFF: Power economizing mode is cancelled.
When the unit turns off, the clock display appears.

Initial mode is ECO OFF.

Standby power consumption
ECO ON: 0.3 W
ECO OFF: 10 W

Setting the clock

1 In stop mode, hold down SHIFT and press CLOCK on the remote.
Go to step 3 when the hour of the clock display flashes.

2 Within 6 seconds, press ENTER/SELECT.
The hour flashes in the display.

3 Press ◄◄ or ►► to set the hour, then press ENTER/SELECT.

4 Press ◄◄ or ►► to set the minute.
Each press changes the time in 1-minute steps.

5 Press ENTER/SELECT.
The time display stops flashing and the clock starts from 00 seconds.

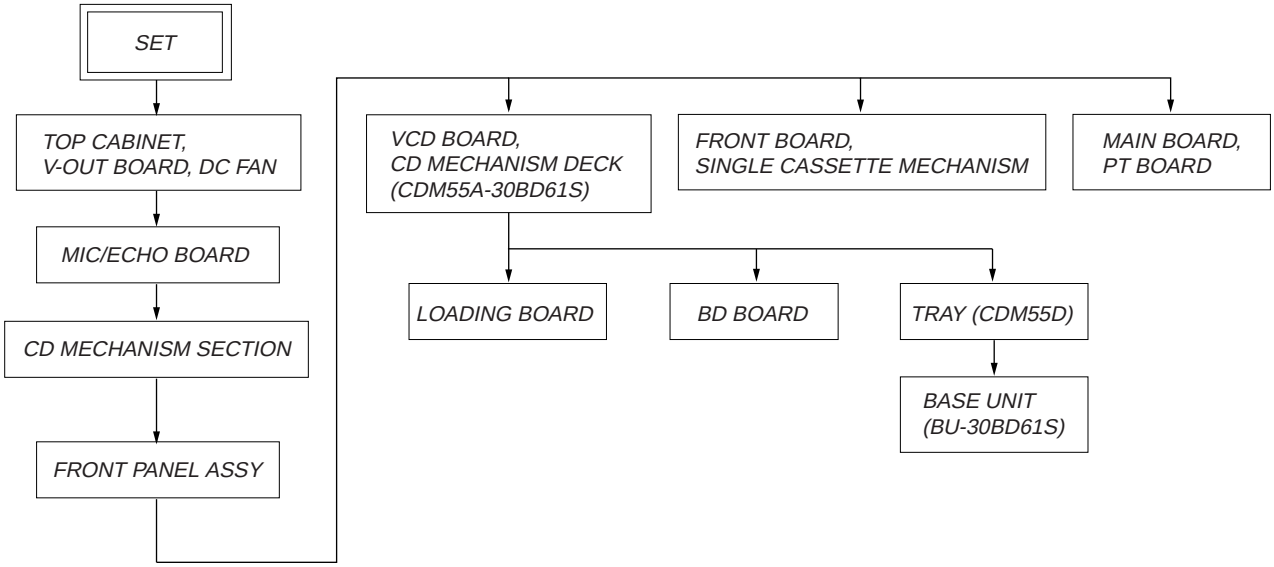
To display the time while the power is on
Hold down SHIFT and press CLOCK on the remote.
The time will be displayed for 6 seconds.

Tip:
"AM 12:00" indicates midnight and "PM 12:00" noon.

If "- -:- -" appears when the unit is turned off
There has been a power interruption. Reset the clock.

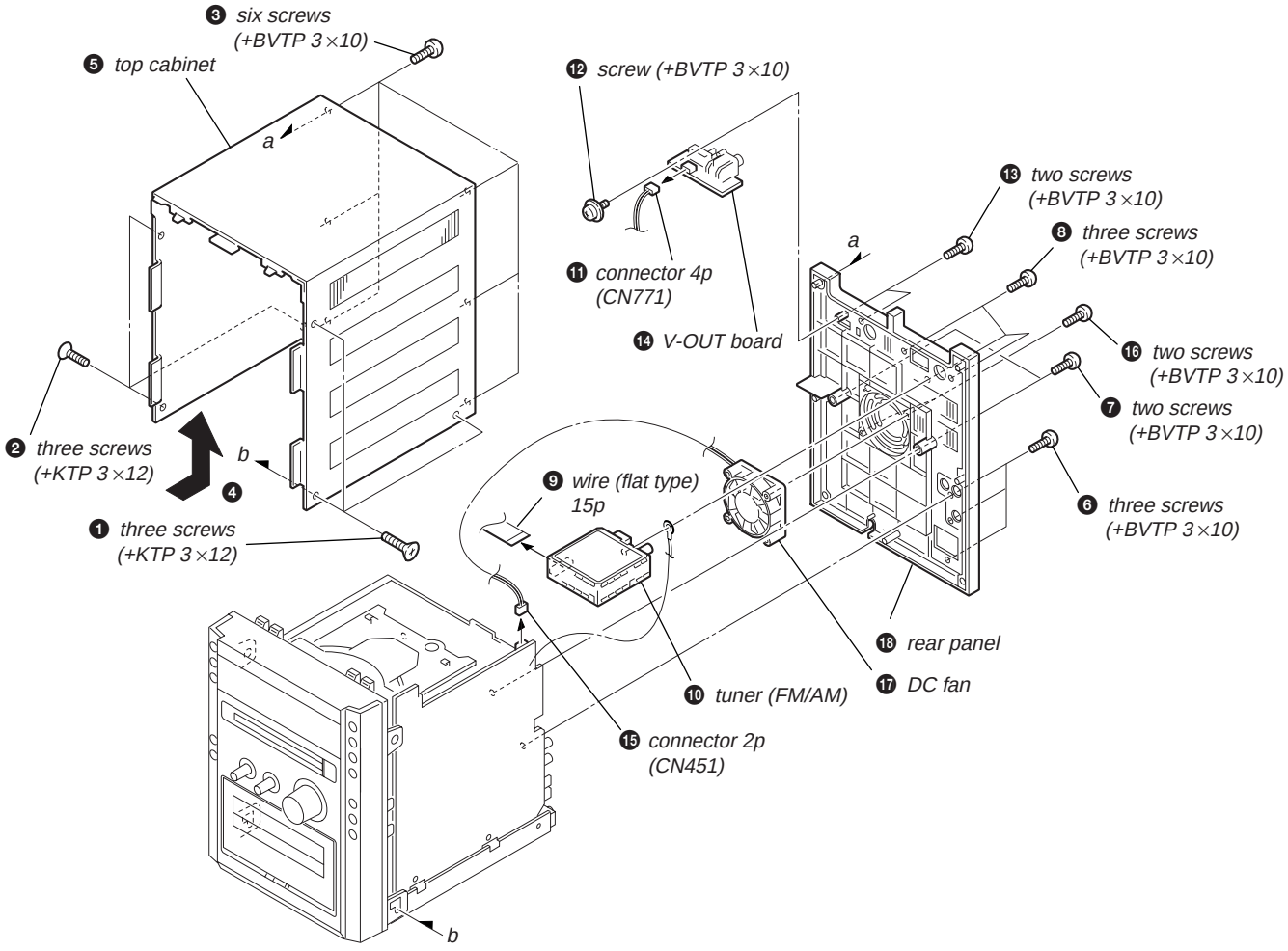
SECTION 3
DISASSEMBLY

• This set can be disassembled in the order shown below.

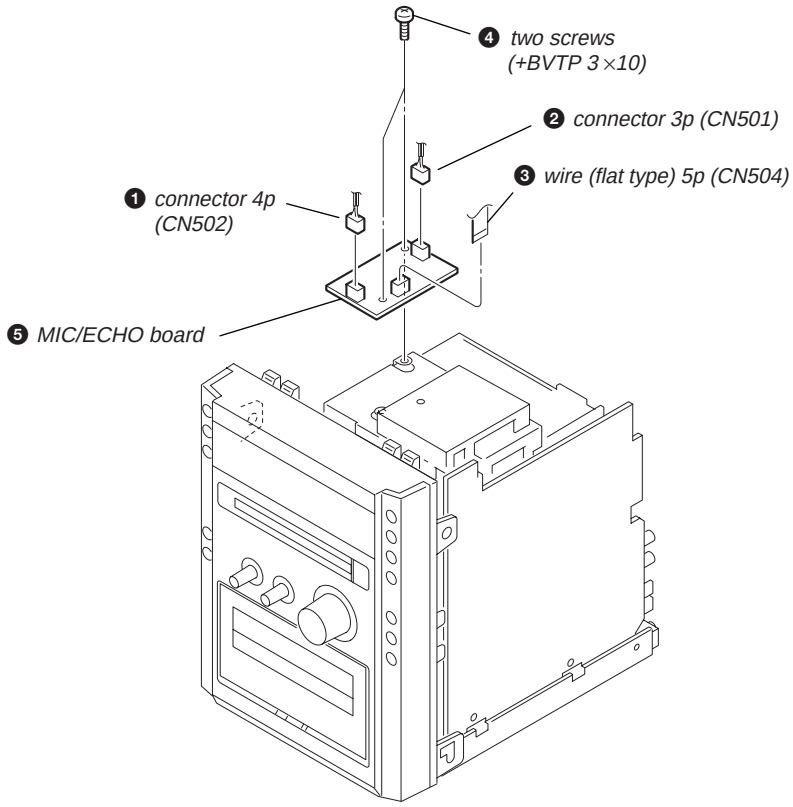


Note: Follow the disassembly procedure in the numerical order given.

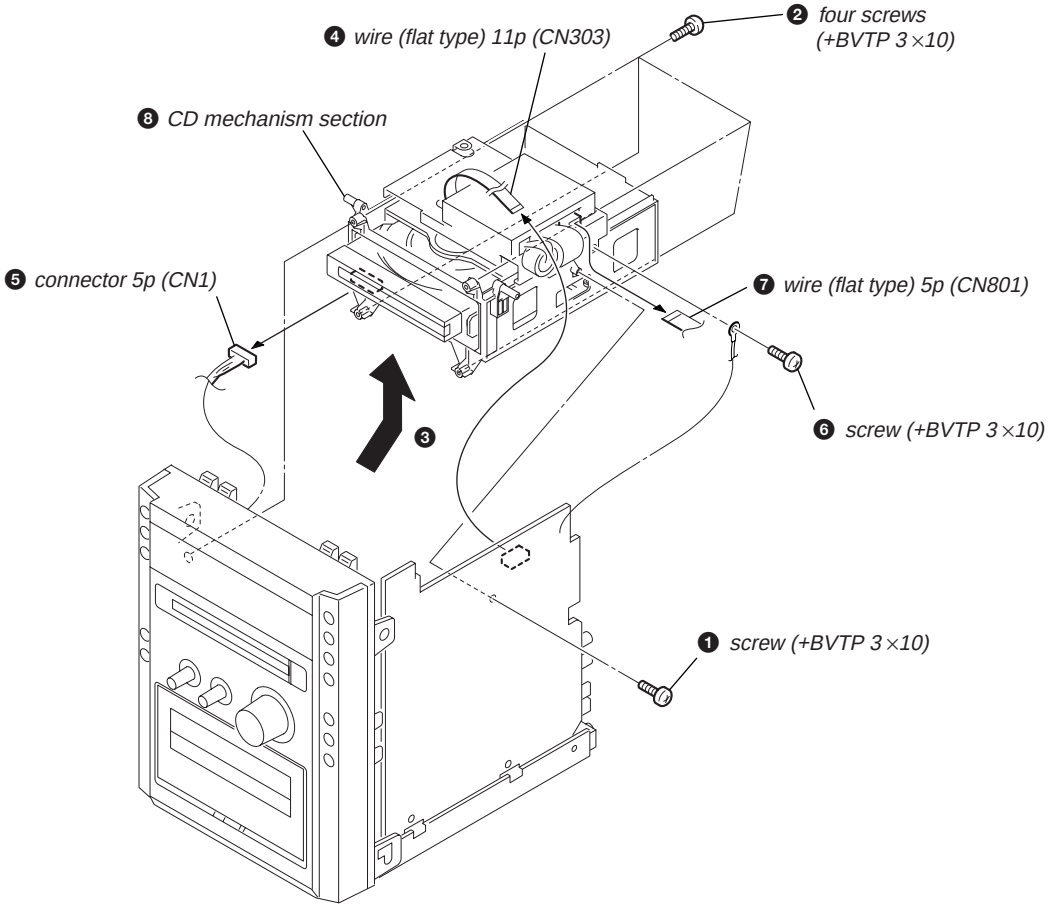
3-1. TOP CABINET, V-OUT BOARD, DC FAN



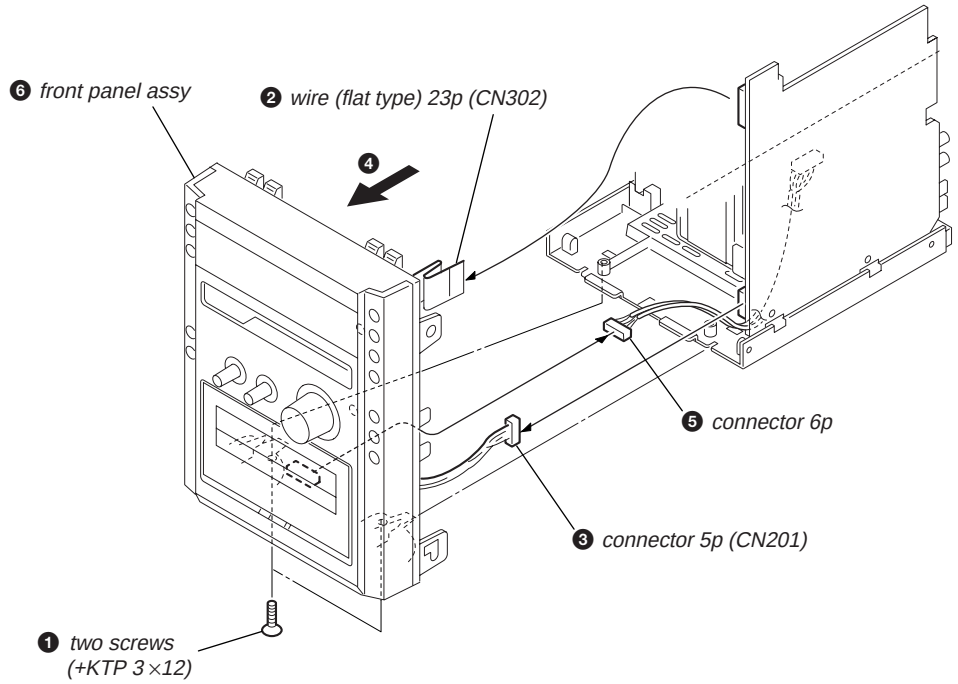
3-2. MIC/ECHO BOARD



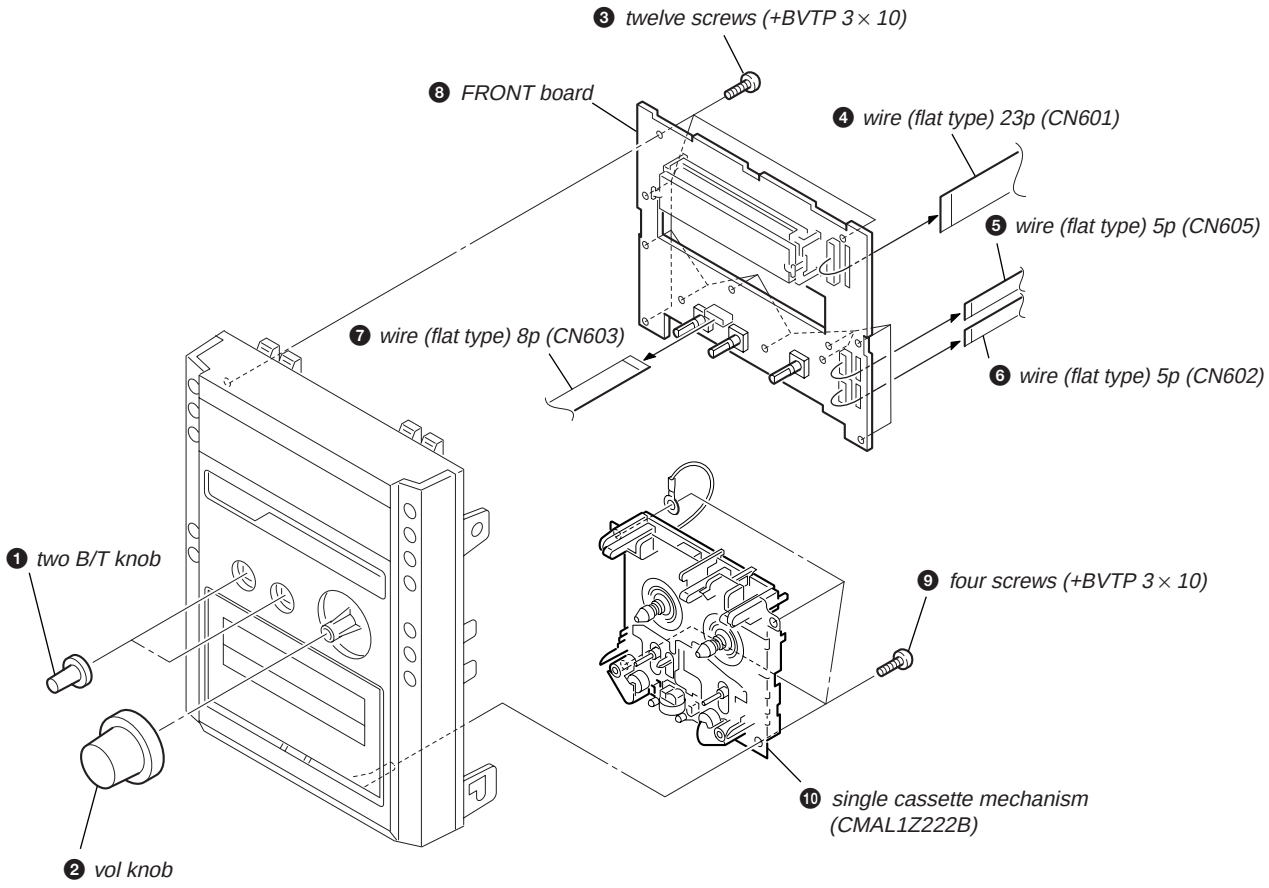
3-3. CD MECHANISM SECTION



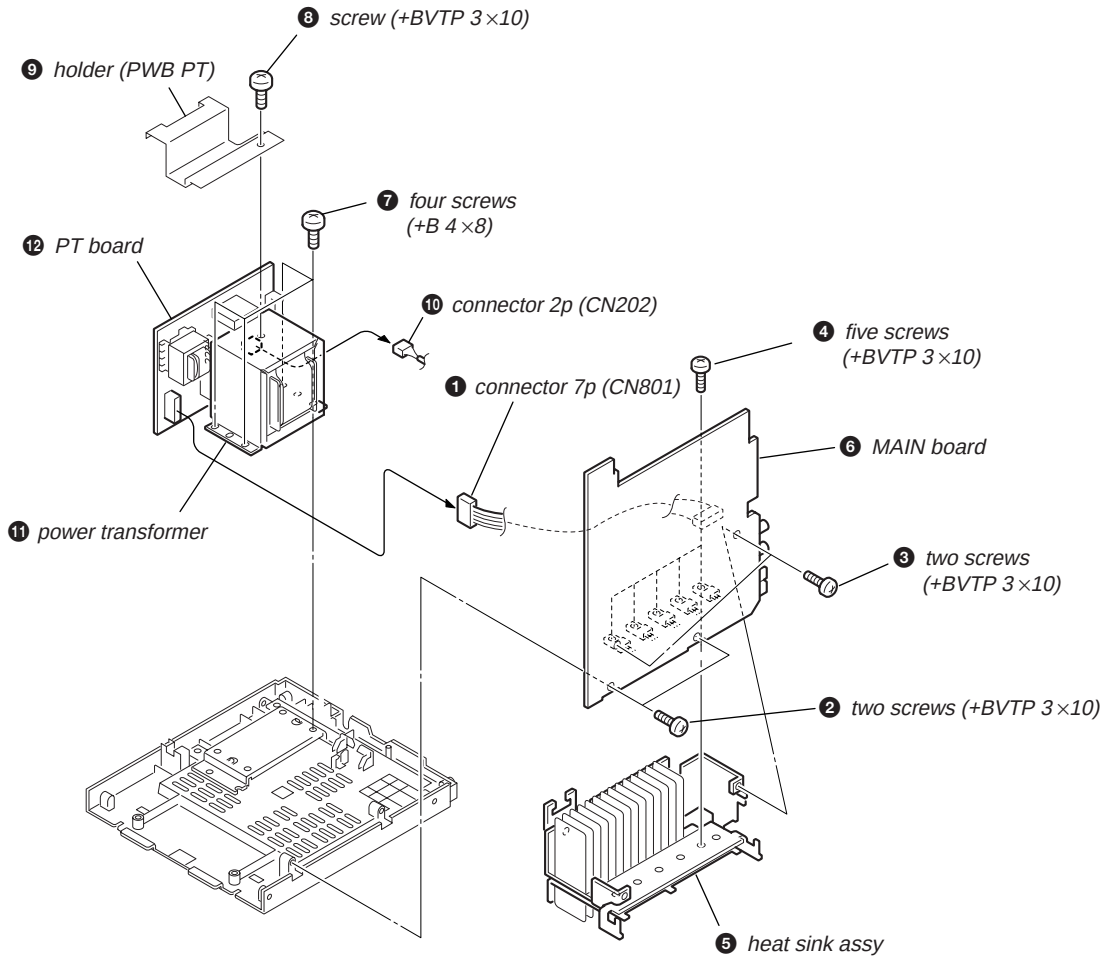
3-4. FRONT PANEL ASSY



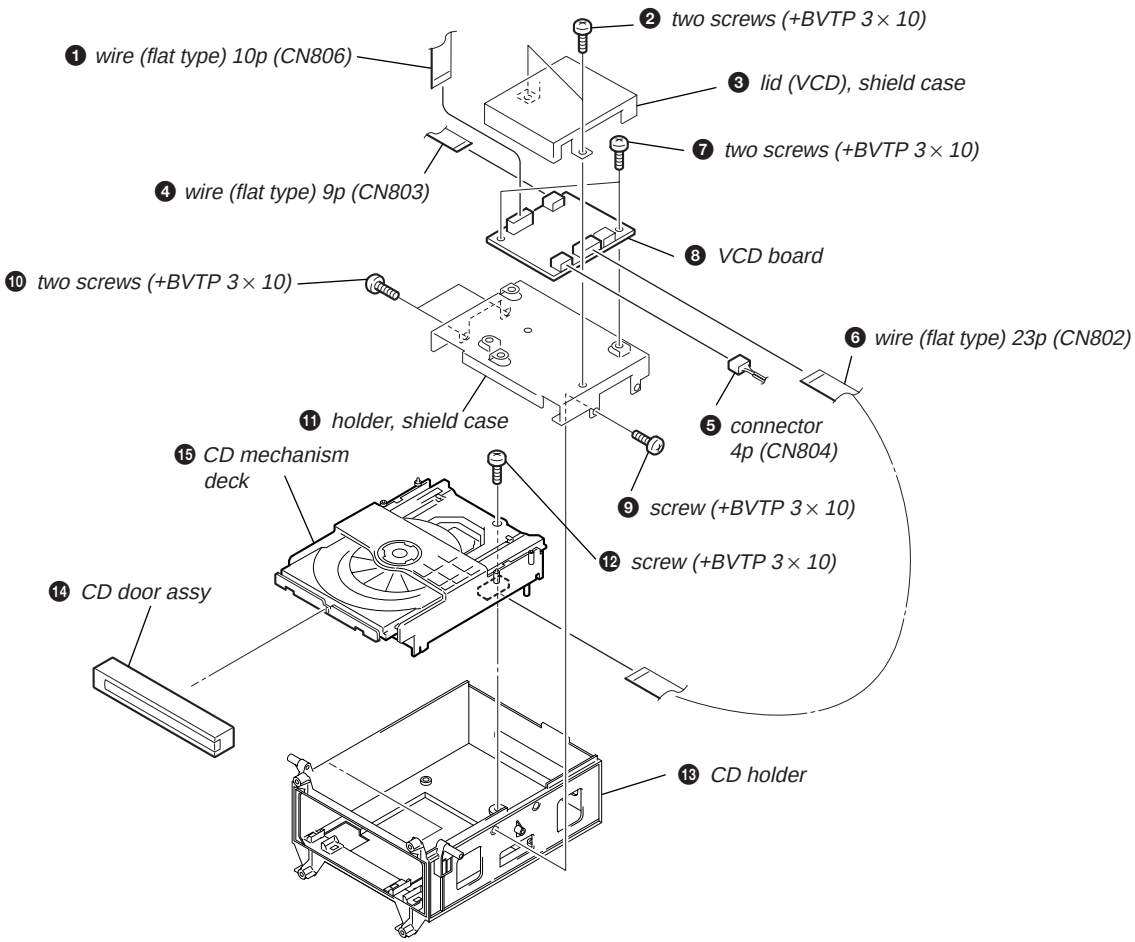
3-5. FRONT BOARD, SINGLE CASSETTE MECHANISM


❸ twelve screws (+BVTP 3× 10)
❽ FRONT board
❹ wire (flat type) 23p (CN601)
❺ wire (flat type) 5p (CN605)
❼ wire (flat type) 8p (CN603)
❻ wire (flat type) 5p (CN602)
❶ two B/T knob
❾ four screws (+BVTP 3× 10)
❿ single cassette mechanism
(CMAL1Z222B)
❷ vol knob

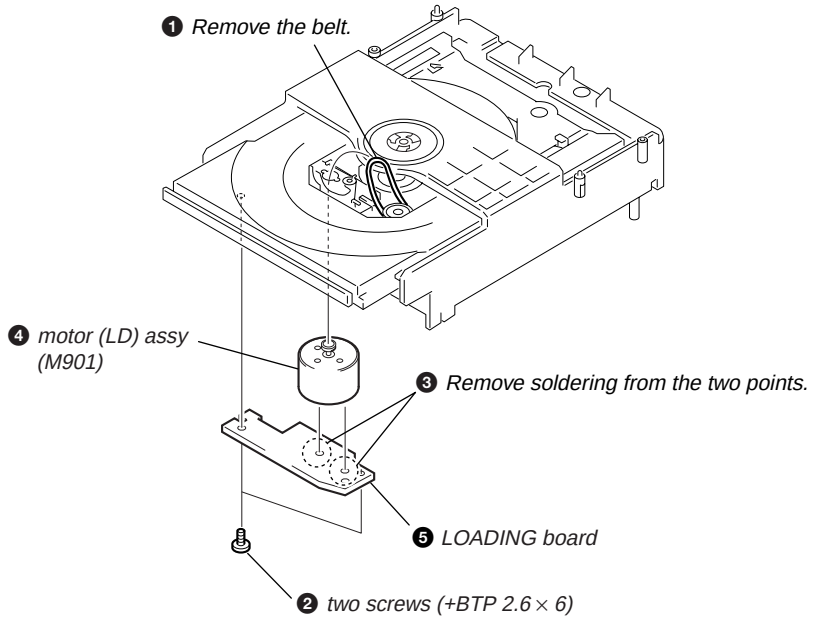
3-6. MAIN BOARD, PT BOARD


❽ screw (+BVTP 3×10)
❾ holder (PWB PT)
❼ four screws (+B 4×8)
⓬ PT board
❿ connector 2p (CN202)
❹ five screws (+BVTP 3×10)
❶ connector 7p (CN801)
❻ MAIN board
⓫ power transformer
❸ two screws (+BVTP 3×10)
❷ two screws (+BVTP 3×10)
❺ heat sink assy

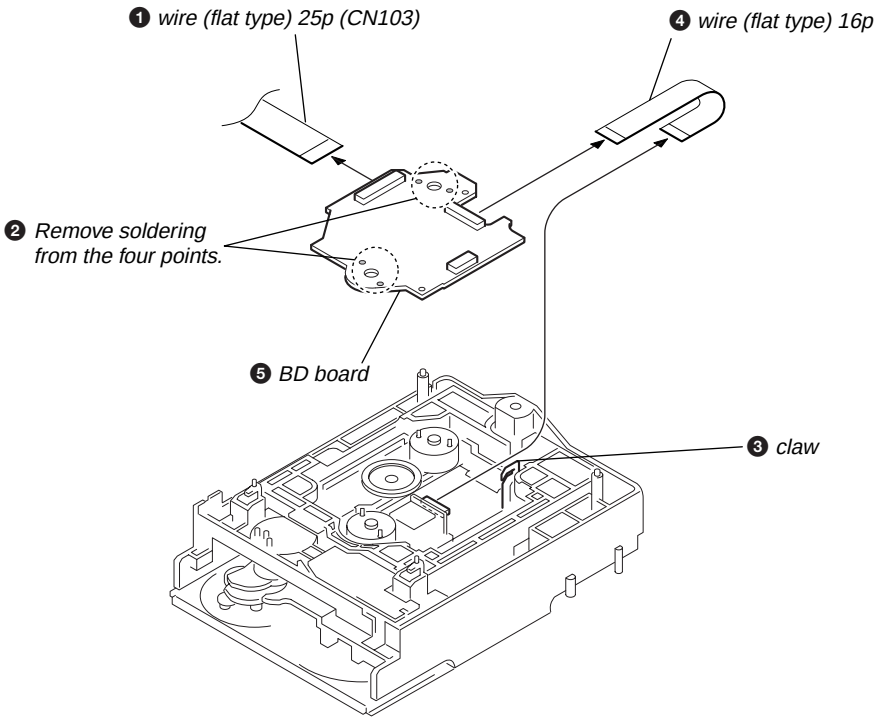
3-7. VCD BOARD, CD MECHANISM DECK (CDM55A-30BD61S)


❷ two screws (+BVTP 3× 10)
❶ wire (flat type) 10p (CN806)
❸ lid (VCD), shield case
❼ two screws (+BVTP 3× 10)
❹ wire (flat type) 9p (CN803)
❽ VCD board
❿ two screws (+BVTP 3× 10)
❻ wire (flat type) 23p (CN802)
⓫ holder, shield case
❺ connector 4p (CN804)
⓯ CD mechanism deck
❾ screw (+BVTP 3× 10)
⓬ screw (+BVTP 3× 10)
⓮ CD door assy
⓭ CD holder

3-8. LOADING BOARD

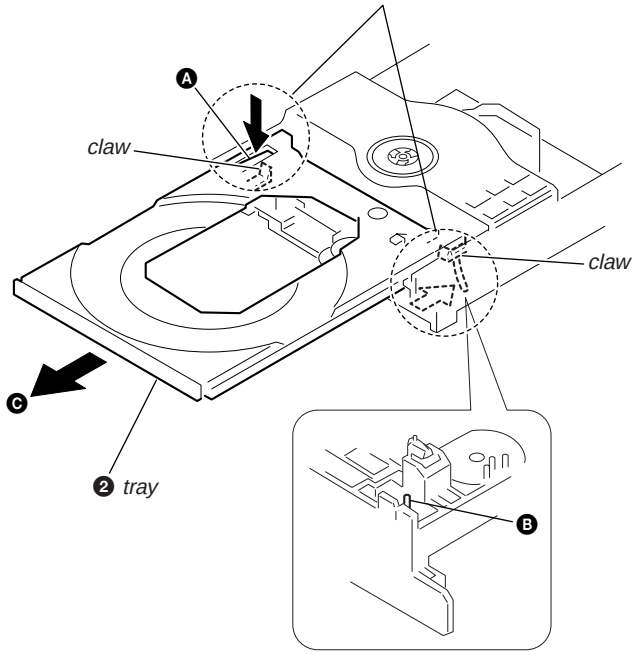


3-9. BD BOARD

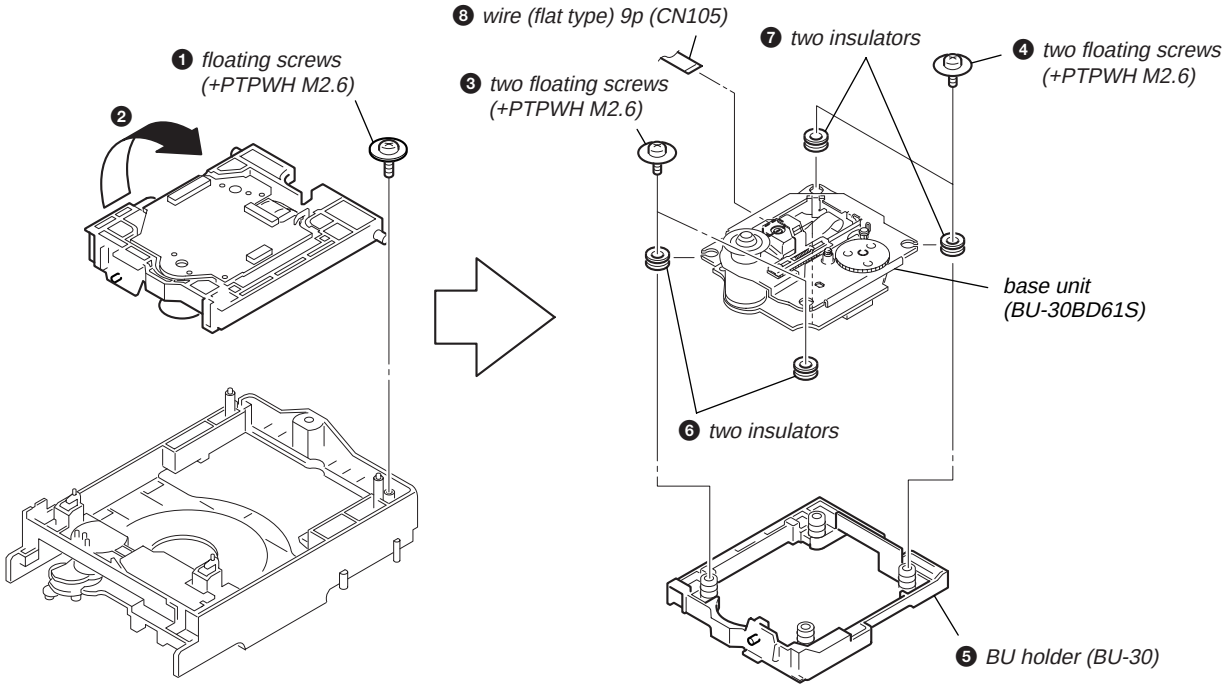


3-10. TRAY (CDM55D)

❶ While pressing the two protrusions Ⓐ and Ⓑ to unlock the two claws as shown, pull the tray in the direction of the arrow Ⓒ. (Be careful of the claws.)



3-11. BASE UNIT (BU-30BD61S)


❶ floating screws (+PTPWH M2.6)
❷
❸ two floating screws (+PTPWH M2.6)
❽ wire (flat type) 9p (CN105)
❼ two insulators
❹ two floating screws (+PTPWH M2.6)
base unit (BU-30BD61S)
❻ two insulators
❺ BU holder (BU-30)

SECTION 4
TEST MODE

[Cold Reset]

* The cold reset clears all data including preset data stored in the RAM to initial conditions. Execute this mode when returning the set to the customer.

Procedure:

1. Press the [POWER] button to turn off the main power.
2. While depressing the [■] button, press the [POWER] button.
3. The fluorescent indicator tube does not display any message and the set is reset.

[Fluorescent Indicator Tube Test Mode]

* Fluorescent segments are tested when this test is activated.

Procedure:

1. Extract an AC plug.
2. While depressing the [CD ▶II] button, insert an AC plug.
3. All segments of the fluorescent indicator tube turn on.
4. CD test mode is activated.
5. To exit from this mode, press the [POWER] button or disconnect the power cord.

[Version Display Mode]

* The model and the version are displayed.

Procedure:

1. Press the [POWER] button to turn the set on.
2. To enter the test mode, press two buttons [■] and [POWER] simultaneously for more than five seconds. The model and the version are displayed.

[AMP Test]

* This mode is used to check the function of the amplifier.

Procedure:

1. Extract an AC plug.
2. While depressing the [AUX] button, insert an AC plug to enter the AMP test mode. The message “AMP TEST” is displayed.
3. The message “Volume MAX” is displayed, when the [VOLUME] knob is rotated clockwise. The message “Volume 0” is displayed, when the [VOLUME] knob is rotated counterclockwise.
4. Each time the [BASS] or [TREBLE] knob is turned, the message “EQ MAX”, “EQ MIN” or “EQ FLAT” is displayed in this order.
5. To release from this mode, disconnect the AC plug and turn the power off.

[AM Channel Step 9 kHz/10kHz Selection Mode]

* Either the 9 kHz step or 10 kHz step can be selected for the AM channel step.

Procedure:

1. Set the function to AM.
2. While depressing the [TUNER/BAND] button, press the [POWER] button.
3. The channel step is changed over.

[TC Test Mode]

Procedure:

1. Extract an AC plug.
2. While depressing the [TAPE ◀▶] button, insert an AC plug.
3. The message “TC TEST” is displayed and TC test mode is activated.

* Zero Return

1. Press the [+ ▶▶I ▶▶] or [– I◀◀ ◀◀] button.
2. The tape is rewound to the counter zero position.

* Automatic record/playback test

1. Press the [REC START/REC PAUSE] button.
2. The message “AUX” is displayed and AUX input is selected.
3. The tape is rewound to the counter zero position and recording is started automatically.
4. When the [■] button is pressed, the tape is rewound to the recording stated point and the set starts playback.
5. To exit from this mode, press the [POWER] button or disconnect the power cord.

SECTION 5
MECHANICAL ADJUSTMENTS

Precaution

1. Clean the following parts with a denatured alcohol-moistened swab:
   record/playback heads — pinch rollers
   erase head — rubber belts
   capstan — idlers
2. Demagnetize the record/playback head with a head demagnetizer.
3. Do not use a magnetized screwdriver for the adjustments.
4. After the adjustments, apply suitable locking compound to the parts adjusted.
5. The adjustments should be performed with the rated power supply voltage unless otherwise noted.

Torque Measurement

Mode	Torque meter	Meter reading
FWD	CQ-102C	2.94 – 7.84 mN • m (30 to 79 g • cm) (0.42 – 1.11 oz • inch)
FWD back tension	CQ-102C	0.15 – 0.59 mN • m (2 to 6 g • cm) (0.03 – 0.08 oz • inch)
REV	CQ-102RC	2.94 – 7.84 mN • m (30 to 79 g • cm) (0.42 – 1.11 oz • inch)
REV back tension	CQ-102RC	0.15 – 0.59 mN • m (2 to 6 g • cm) (0.03 – 0.08 oz • inch)
FF/REW	CQ-201B	6.86 – 17.64 mN • m (70 to 179 g • cm) (0.98 – 2.49 oz • inch)
FWD tension	CQ-403A	9.8 mN • m or more (100 g • cm or more) (1.4 oz • inch or more)
REV tension	CQ-403R	9.8 mN • m or more (100 g • cm or more) (1.4 oz • inch or more)

SECTION 6
ELECTRICAL ADJUSTMENTS

DECK SECTION **0 dB=0.775V**

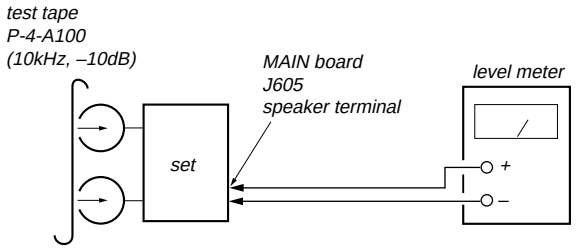
1. Demagnetize the record/playback head with a head demagnetizer.
2. Do not use a magnetized screwdriver for the adjustments.
3. After the adjustments, apply suitable locking compound to the parts adjusted.
4. The adjustments should be performed with the rated power supply voltage unless otherwise noted.
5. The adjustments should be performed in the order given in this service manual. (As a general rule, playback circuit adjustment should be completed before performing recording circuit adjustment.)
6. The adjustments should be performed for both L-CH and R-CH.
7. Switches and controls should be set as follows unless otherwise specified.

Tape	Signal	Used for
P-4-A100	10 kHz, –10 dB	Azimuth Adjustment
WS-48B	3 kHz, 0 dB	Tape Speed Adjustment

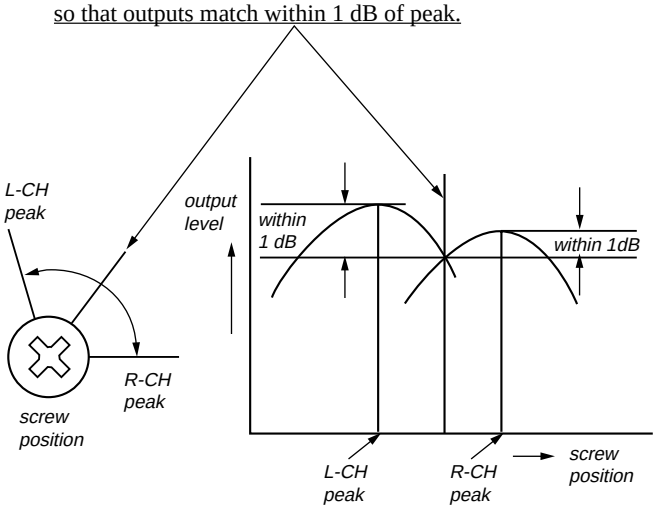
[Record/Playback Head Azimuth Adjustment]

Procedure:

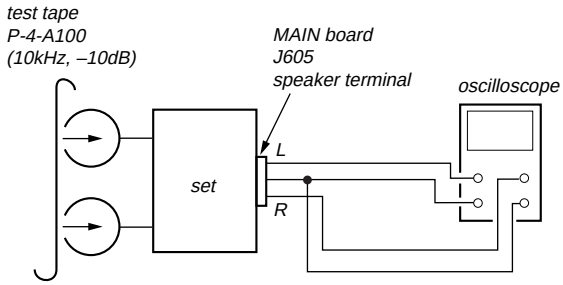
1. Mode : Playback

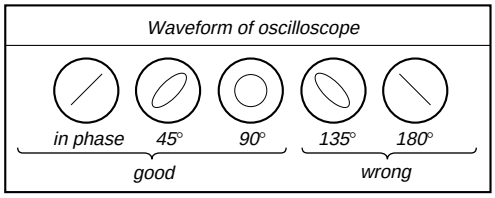


2. Turn the adjustment screw and check output peaks. If the peaks do not match for L-CH and R-CH, turn the adjustment screw so that outputs match within 1 dB of peak.



3. Mode: Playback





4. After the adjustments, apply suitable locking compound to the parts adjusted.

Adjustment Location: Record/Playback/Erase Head

[Tape Speed Check]

Procedure:

1. Turn the power on.
2. Insert the WS-48B into deck.
3. Press the ◀▶ button of deck.
4. Check the reading of frequency counter becomes 3000 ± 90 Hz.

Sample Value of Wow and flutter

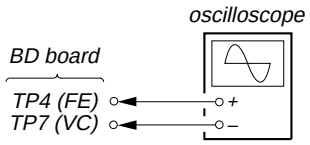
W.RMS (JIS) less than 0.3%
(test tape: WS-48B)

CD SECTION

Note:
1. CD Block is basically designed to operate without adjustment. Therefore, check each item in order given.
2. Use YEDS-18 disc (3-702-101-01) unless otherwise indicated.
3. Use an oscilloscope with more than 10MΩ impedance.
4. Clean the object lens by an applicator with neutral detergent when the signal level is low than specified value with the following checks.

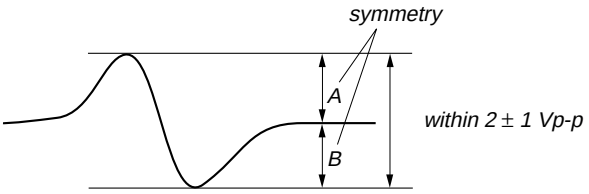
S-curve Check

Connection:



Procedure:
1. Connect an oscilloscope to test point TP4 (FE) and TP7 (VC) on the BD board.
2. Turn the power on.
3. Put the disc (YEDS-18) in and turned power switch on again and actuate the focus search. (actuate the focus search when disc table is moving in and out)
4. Check the oscilloscope waveform (S-curve) is symmetrical between A and B. And confirm peak to peak level within 2 ± 1 Vp-p.

S-curve waveform

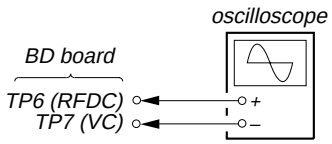


Note: • Try to measure several times to make sure than the ratio of A : B or B : A is more than 10 : 7.
• Take sweep time as long as possible and light up the brightness to obtain best waveform.

Checking Location: BD board (Conductor side)

RFDC Level Check

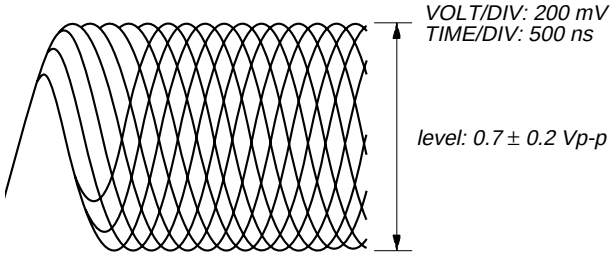
Connection:



Procedure:
1. Connect an oscilloscope to test point TP6 (RFDC) and TP7 (VC) on the BD board.
2. Turn the power on.
3. Put the disc (YEDS-18) in to playback the number five track.
4. Confirm that oscilloscope waveform is clear and check RFDC signal level is correct or not.

Note: A clear RFDC signal waveform means that the shape "◊" can be clearly distinguished at the center of the waveform.

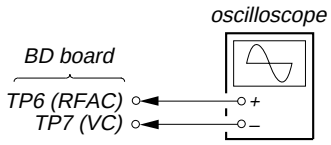
RFDC signal waveform



Checking Location: BD board (Conductor side)

RFAC Level Check

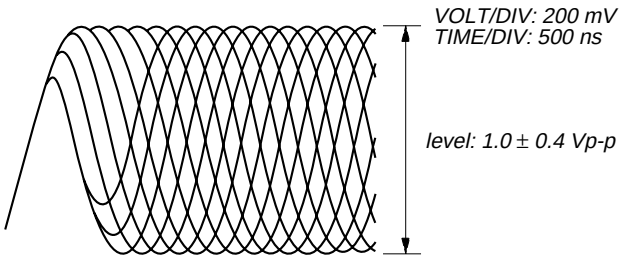
Connection:



Procedure:
1. Connect an oscilloscope to test point TP6 (RFAC) and TP7 (VC) on the BD board.
2. Turn the power on.
3. Put the disc (YEDS-18) in to playback the number five track.
4. Confirm that oscilloscope waveform is clear and check RFAC signal level is correct or not.

Note: A clear RFAC signal waveform means that the shape "◊" can be clearly distinguished at the center of the waveform.

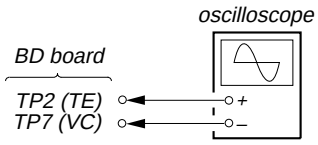
RFAC signal waveform



Checking Location: BD board (Conductor side)

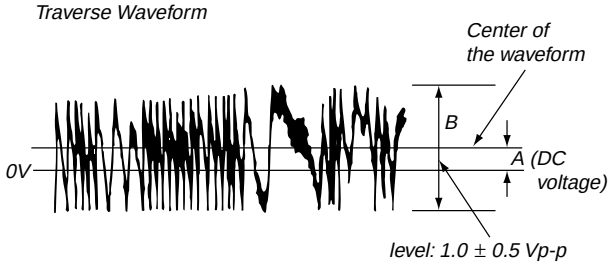
E-F Balance Adjustment

Connection:



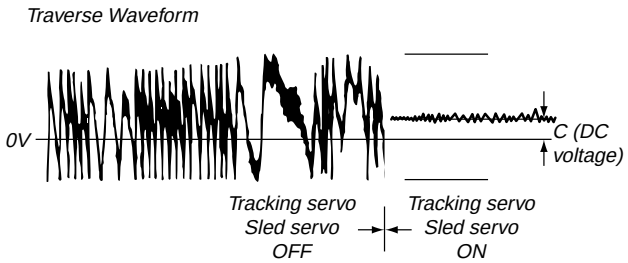
Procedure:

1. Connect an oscilloscpe to test point TP2 (TE) and TP7 (VC) on the BD board.
2. AC is put in pushing CD ▶II button to enter the CD test mode.
3. Put the disc (YEDS-18) in to playback the number five track.
4. Press the CD ▶II button. If it plays, press the CD ▶II button again. (The tracking servo and the sledding servo are turned OFF)
5. Check the level B of the oscilliscope's waveform and the A (DC voltage) of the center of the Traverse waveform.
   Confirm the following :
   A/B x 100 = less than ± 10%



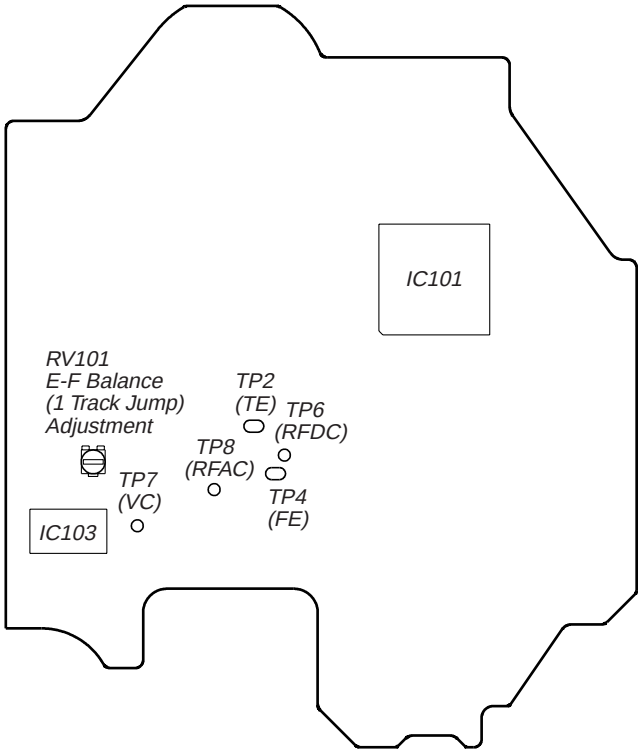
6. Press the CD ▶II button. (The tracking servo and sledding servo are turned ON)
   Rotate RV101 on BD board and adjust the C (DC voltage) is almost equal to the A (DC voltage) in step 4.
7. To exit from this mode, turn the power off.

Notes:
- Always move the optical pick-up to most inside track when exiting from this mode. Otherwise, a disc will not be unloaded.
- Do not run the sled motor excessively, otherwise the gear can be chipped.



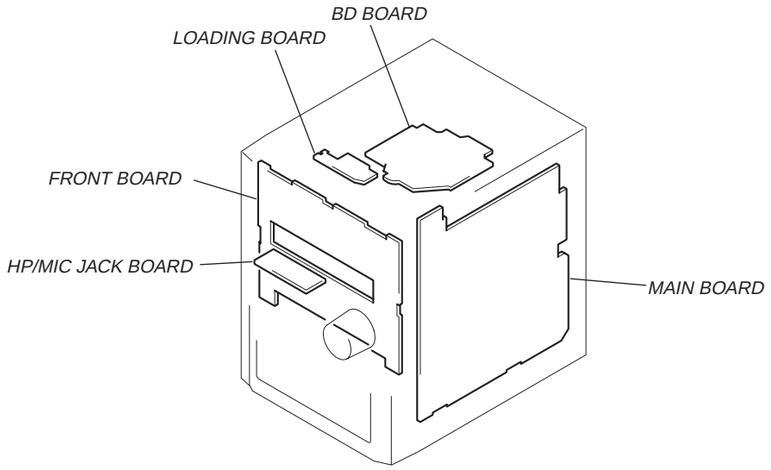
Connecting Location:

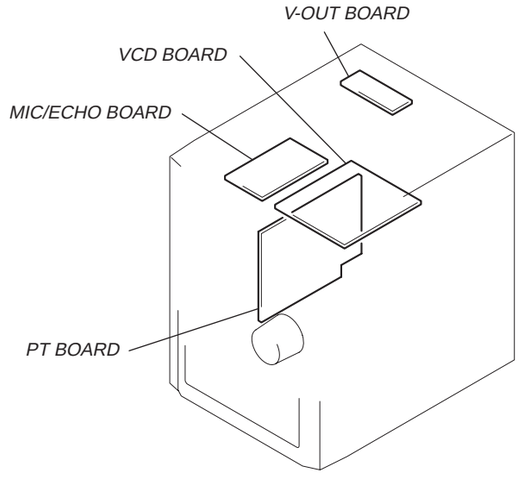
– BD BOARD (Conductor Side) –



SECTION 7
DIAGRAMS

• Circuit Boards Location





THIS NOTE IS COMMON FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS.
(In addition to this, the necessary note is printed in each block.)

For schematic diagrams.

Note:

- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- ✻ : Impossible to measure
- △ : internal component.
- : nonflammable resistor.
- : panel designation.
- : adjustment for repair.

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

- : B+ Line.
- : B– Line.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  - : TUNER
  - : CD
  - : AUX
  - : PB (TAPE)
  - : REC (TAPE)
  - : VIDEO
  - : MIC
- Abbreviation
  - MY : Malaysia model.
  - SP : Singapore model.
  - TH : Thai model.

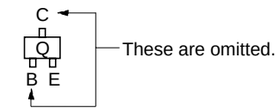
For printed wiring boards.

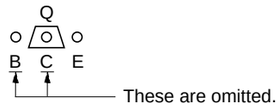
Note:

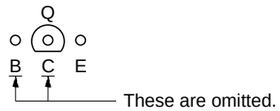
- : parts extracted from the component side.
- : parts extracted from the conductor side.
- △ : internal component.
- : Pattern from the side which enables seeing.

Caution:	
Pattern face side: (Side B)	Parts on the pattern face side seen from the pattern face are indicated.
Parts face side: (Side A)	Parts on the parts face side seen from the parts face are indicated.

• Indication of transistor

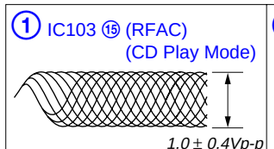


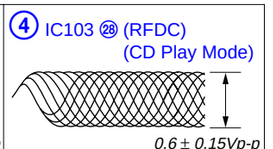


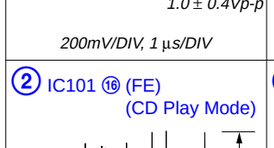


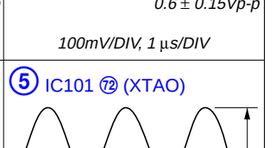
• Waveforms

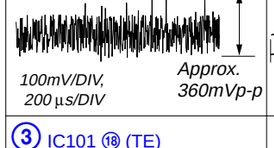
– BD Board –



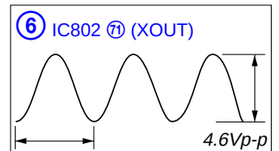




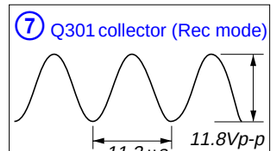




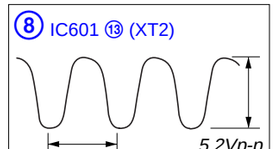
– VCD Board –

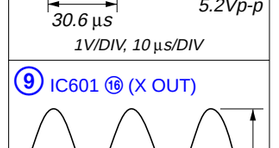


– MAIN Board –



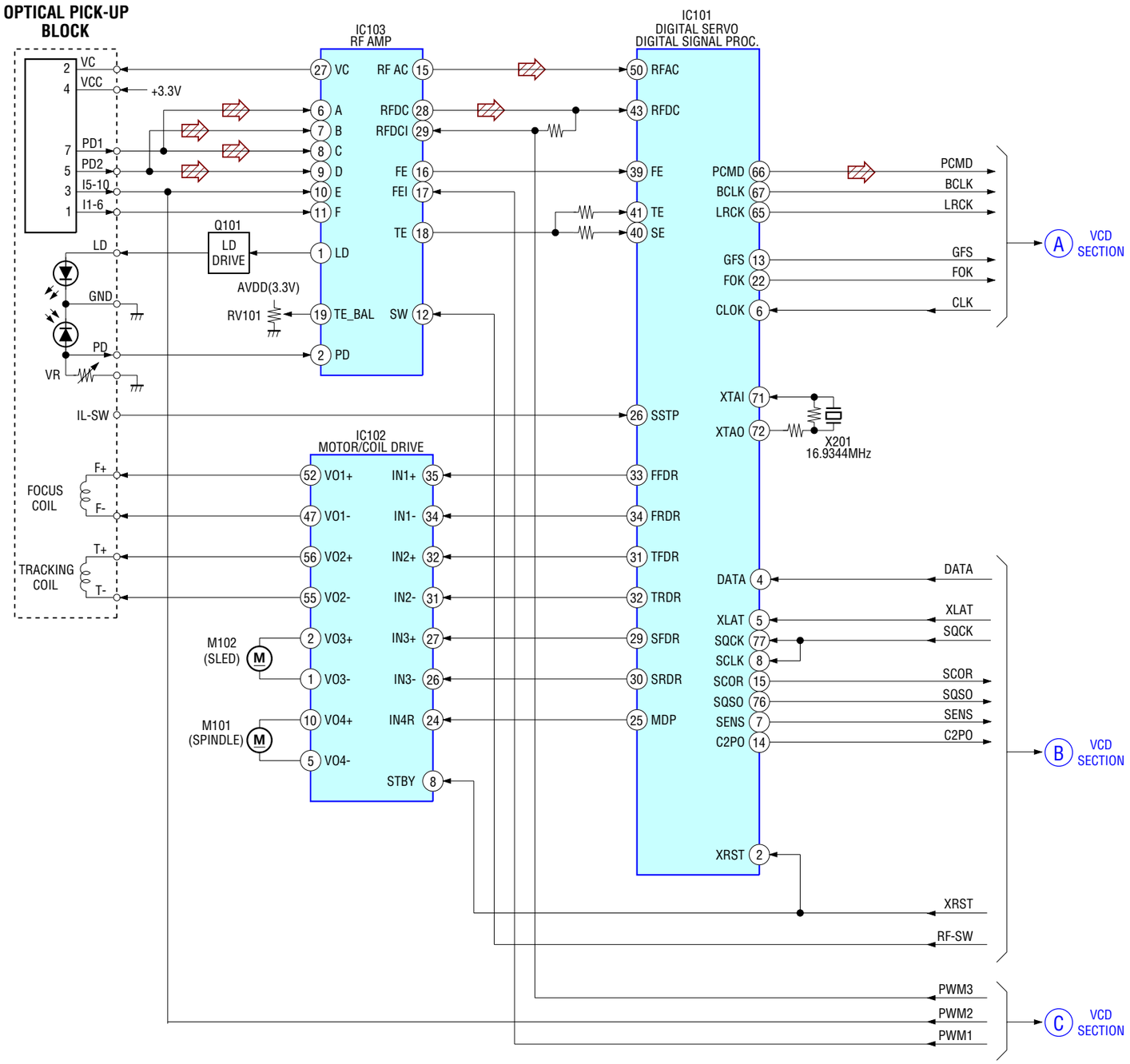
– FRONT Board –





19

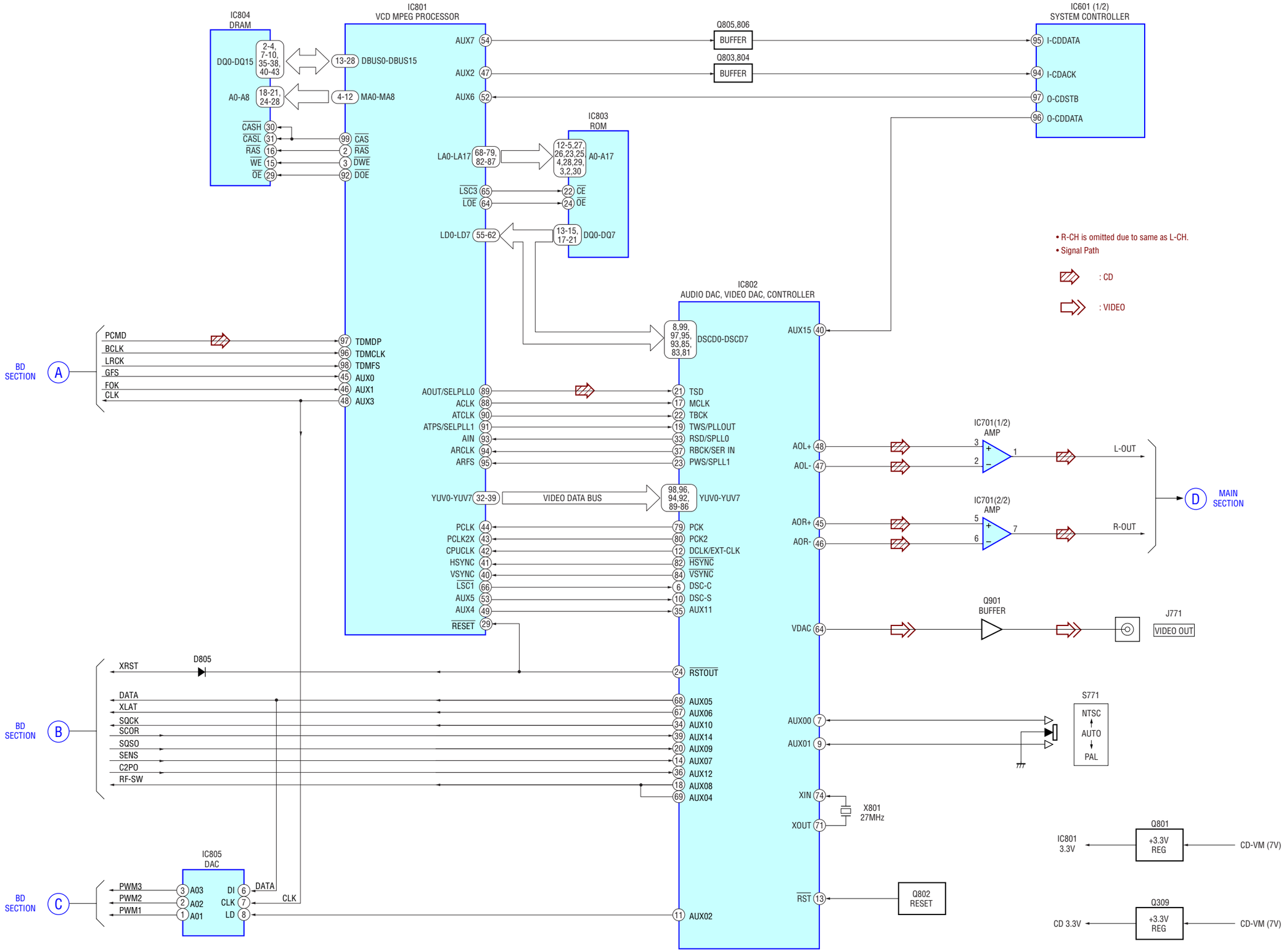
7-1. BLOCK DIAGRAM – BD SECTION –



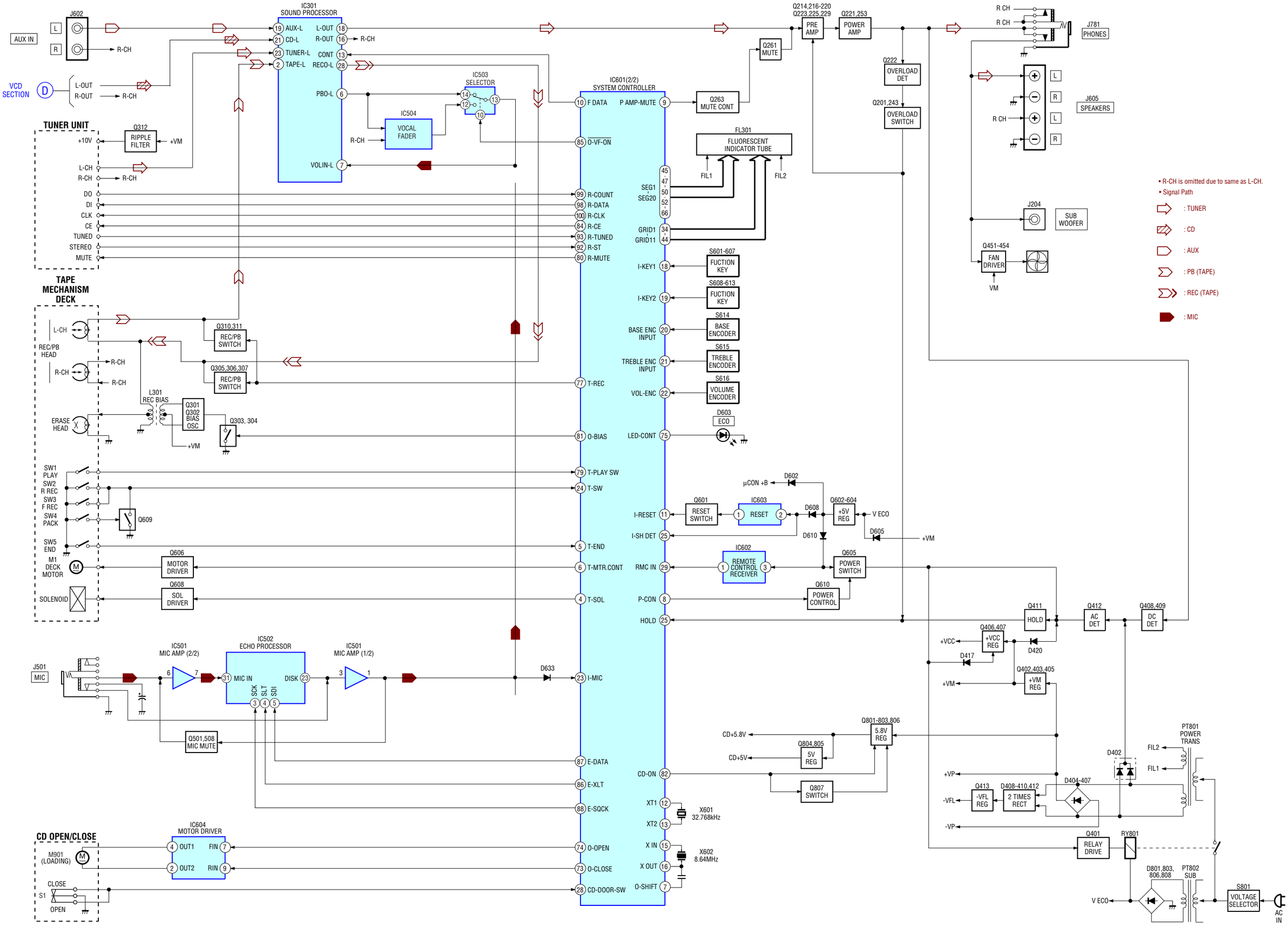
• Signal Path

: CD

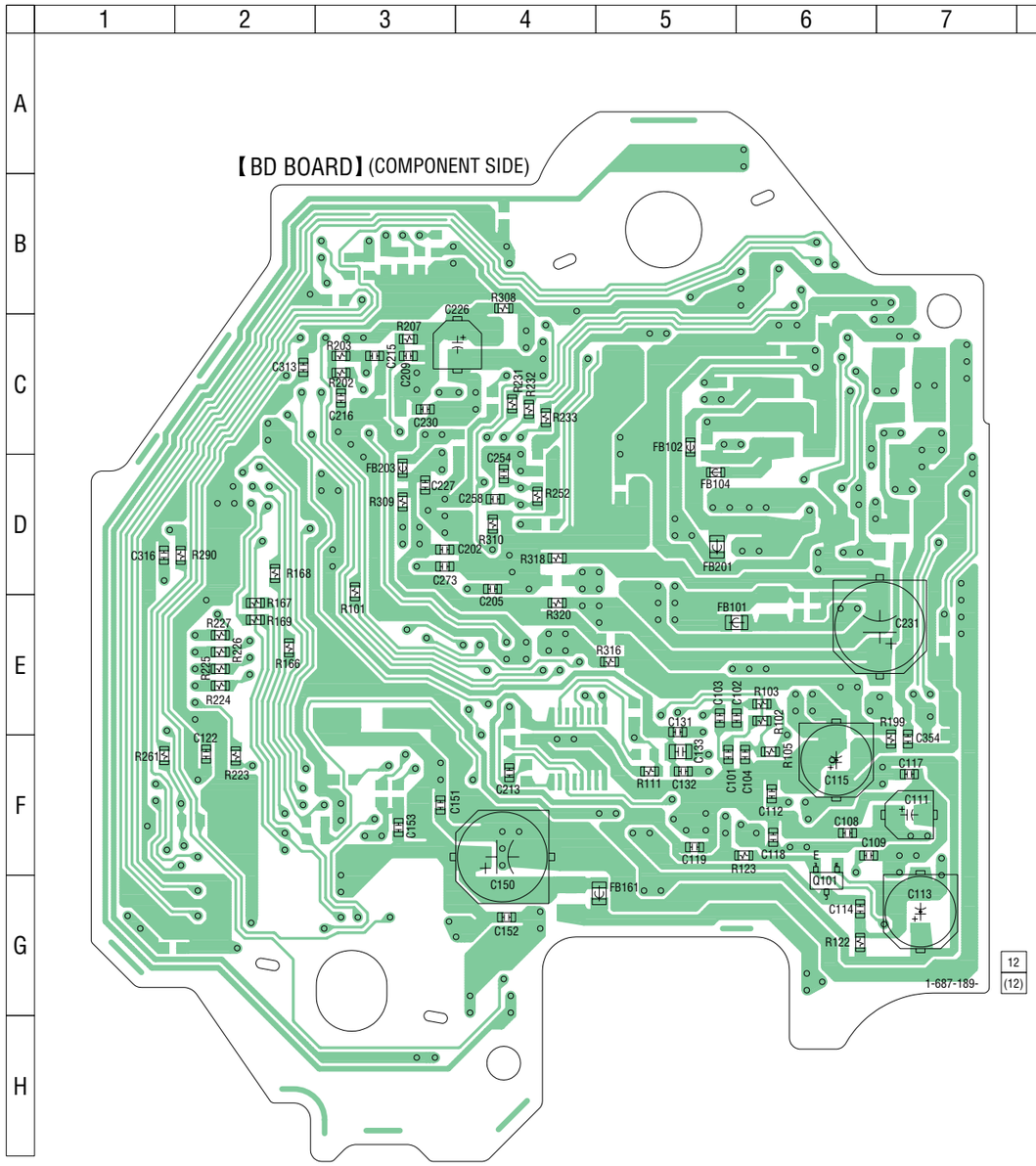
7-2. BLOCK DIAGRAM – VCD SECTION –

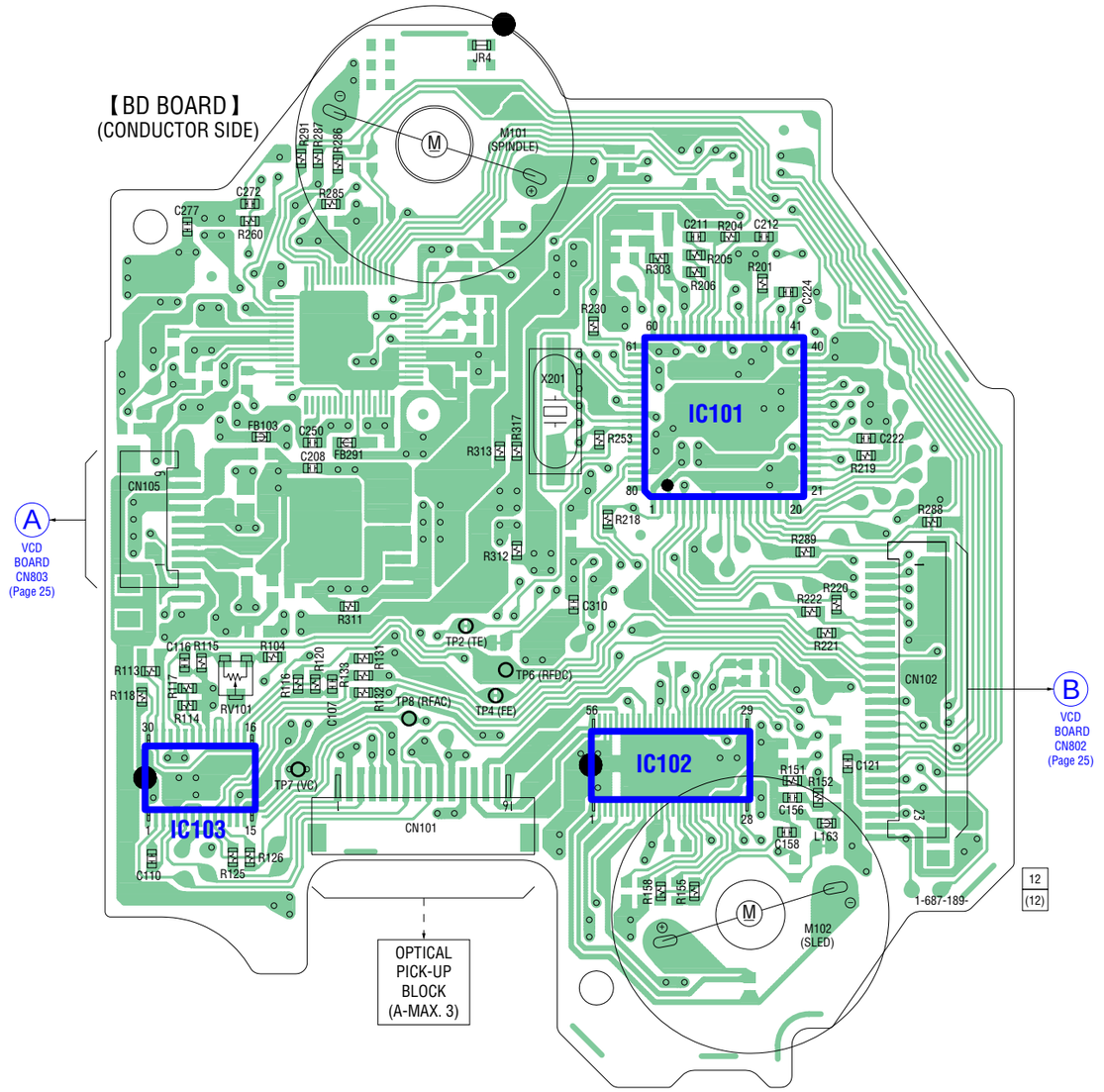


7-3. BLOCK DIAGRAM – MAIN SECTION –



7-4. PRINTED WIRING BOARD – BD SECTION – • See page 19 for Circuit Boards Location. • : Uses unleaded solder.



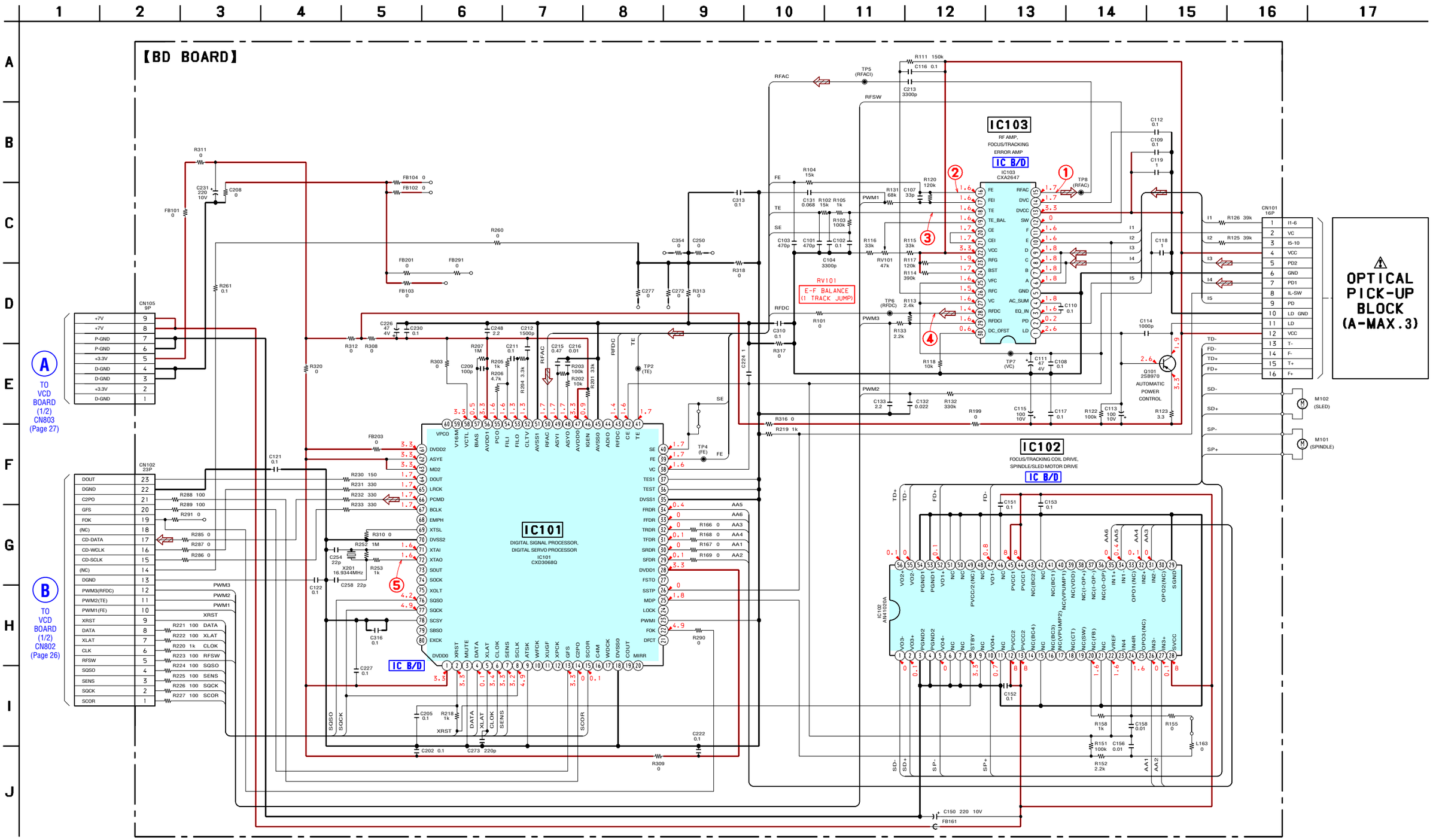


• **Semiconductor Location**

Ref. No.	Location
IC101	D-13
IC102	F-12
IC103	F-9
Q101	G-6

7-5. SCHEMATIC DIAGRAM – BD SECTION –

• See page 19 for Waveforms. • See page 38 for IC Block Diagrams.

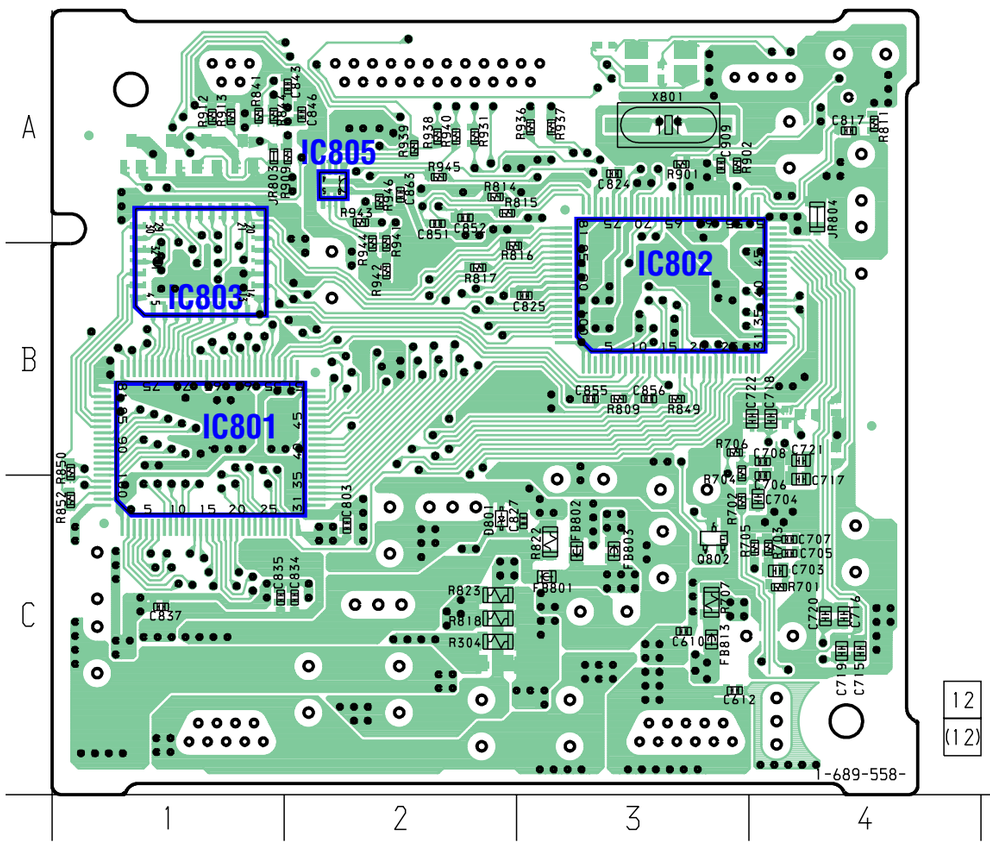


7-6. PRINTED WIRING BOARDS – VCD SECTION –

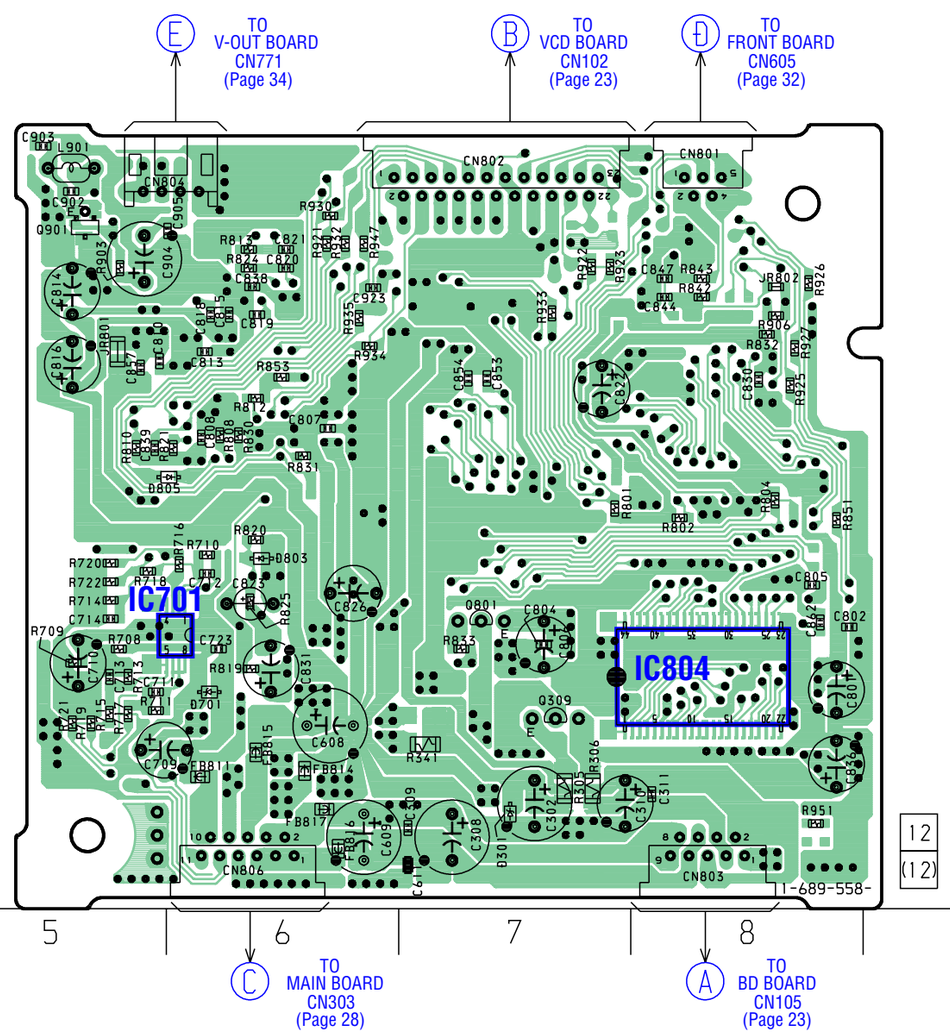
• See page 19 for Circuit Boards Location.

• : Uses unleaded solder.

【VCD BOARD】(SIDE A)



【VCD BOARD】(SIDE B)

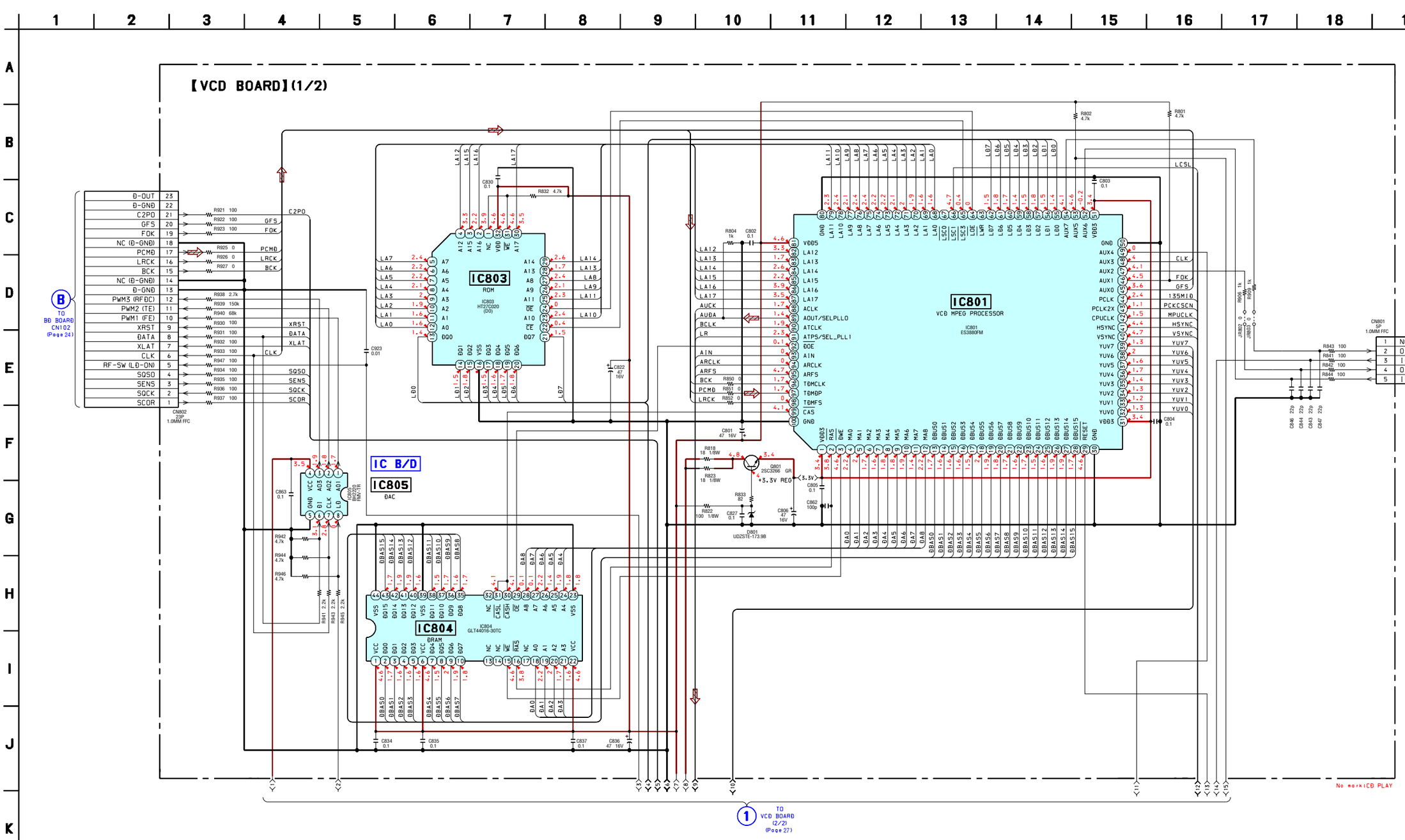


• **Semiconductor Location**

Ref. No.	Location
D301	C-7
D701	C-6
D801	C-2
D803	B-6
D805	B-5
IC701	C-6
IC801	B-1
IC802	B-3
IC803	B-1
IC804	C-8
IC805	A-2
Q309	C-7
Q801	C-7
Q802	C-3
Q901	A-5

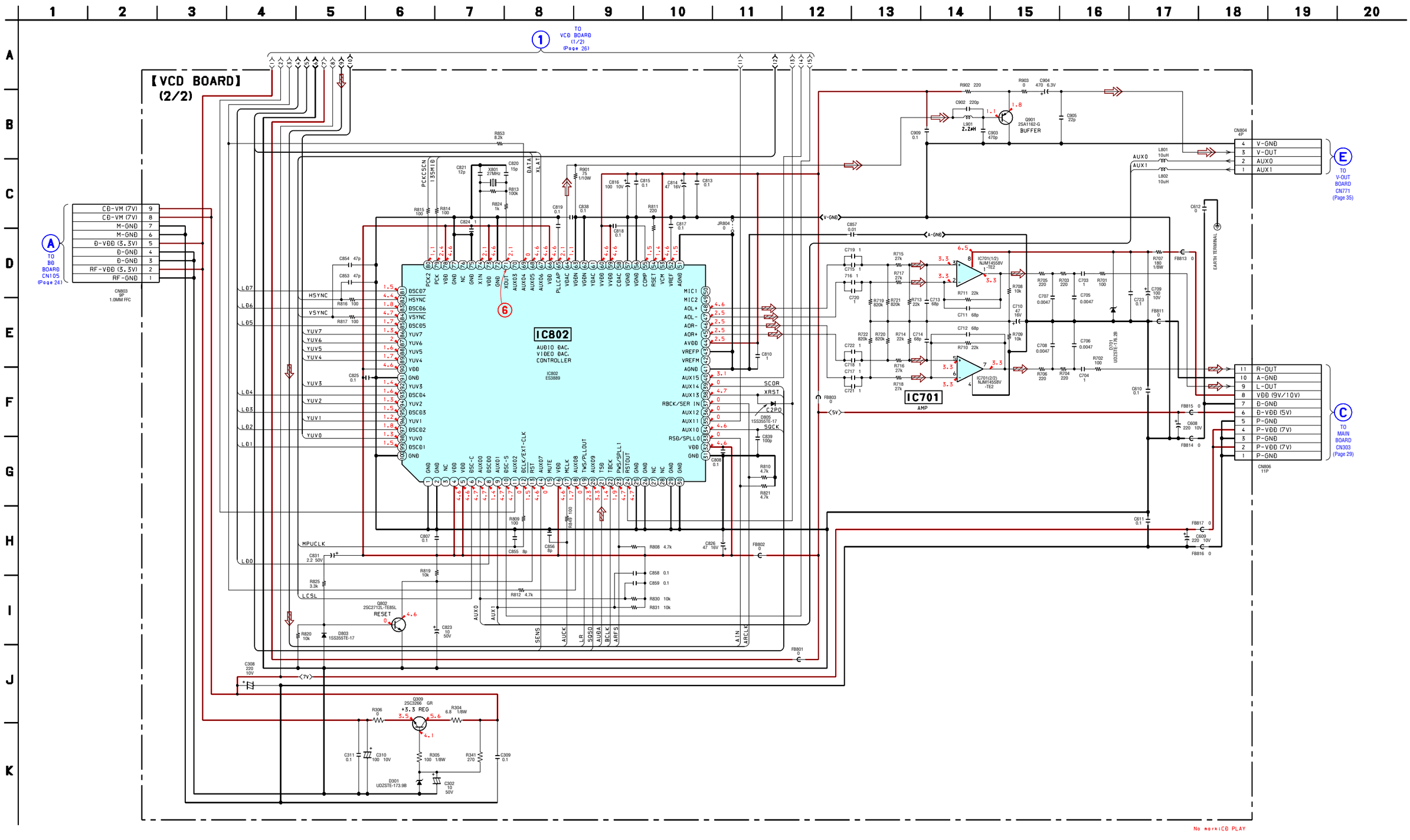
7-7. SCHEMATIC DIAGRAM – VCD SECTION (1/2) –

• See page 19 for Waveforms. • See page 39 for IC Block Diagrams.



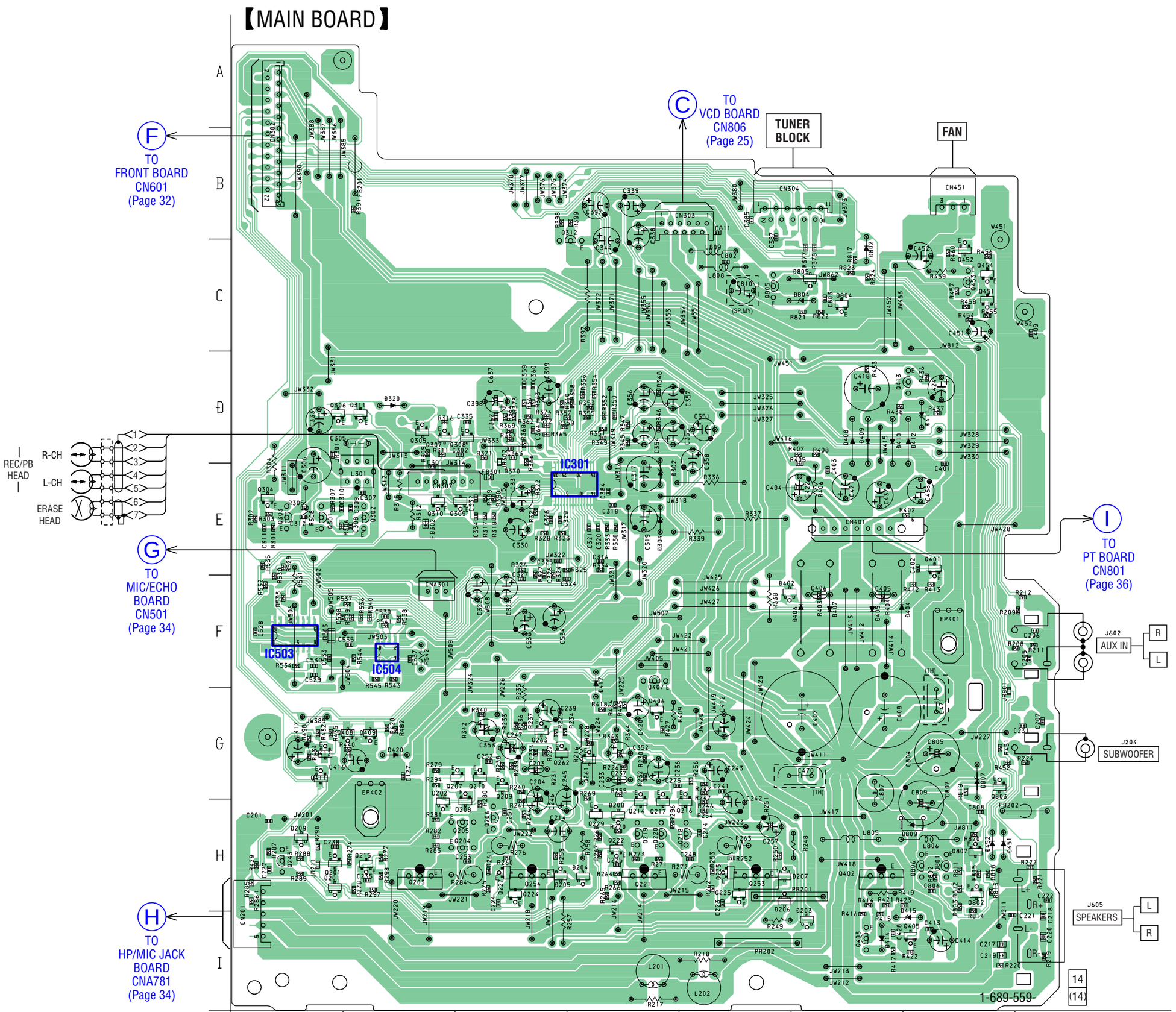
7-8. SCHEMATIC DIAGRAM – VCD SECTION (2/2) –

• See page 19 for Waveforms.



7-9. PRINTED WIRING BOARD – MAIN SECTION –

• See page 19 for Circuit Boards Location.

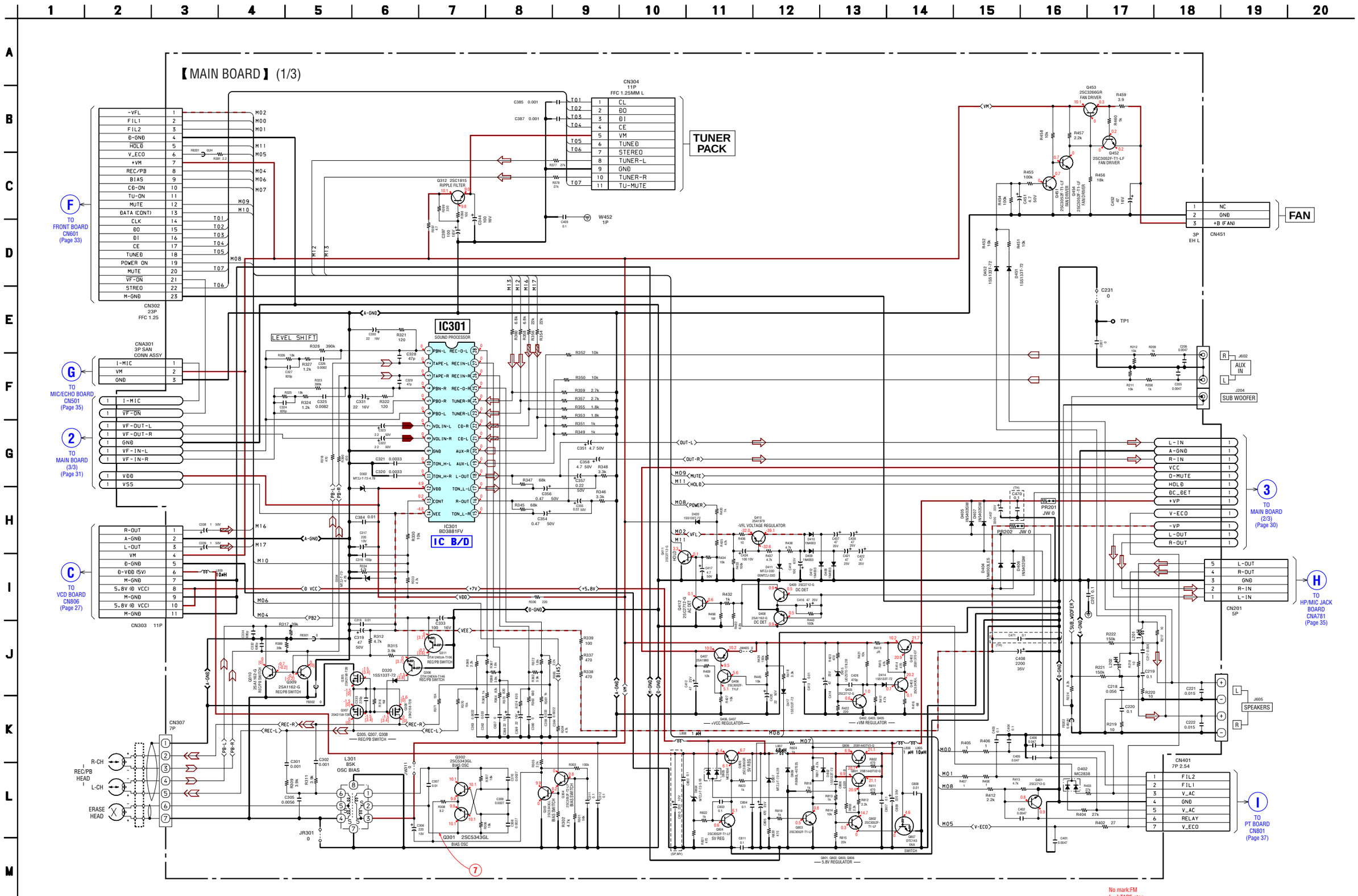


• **Semiconductor Location**

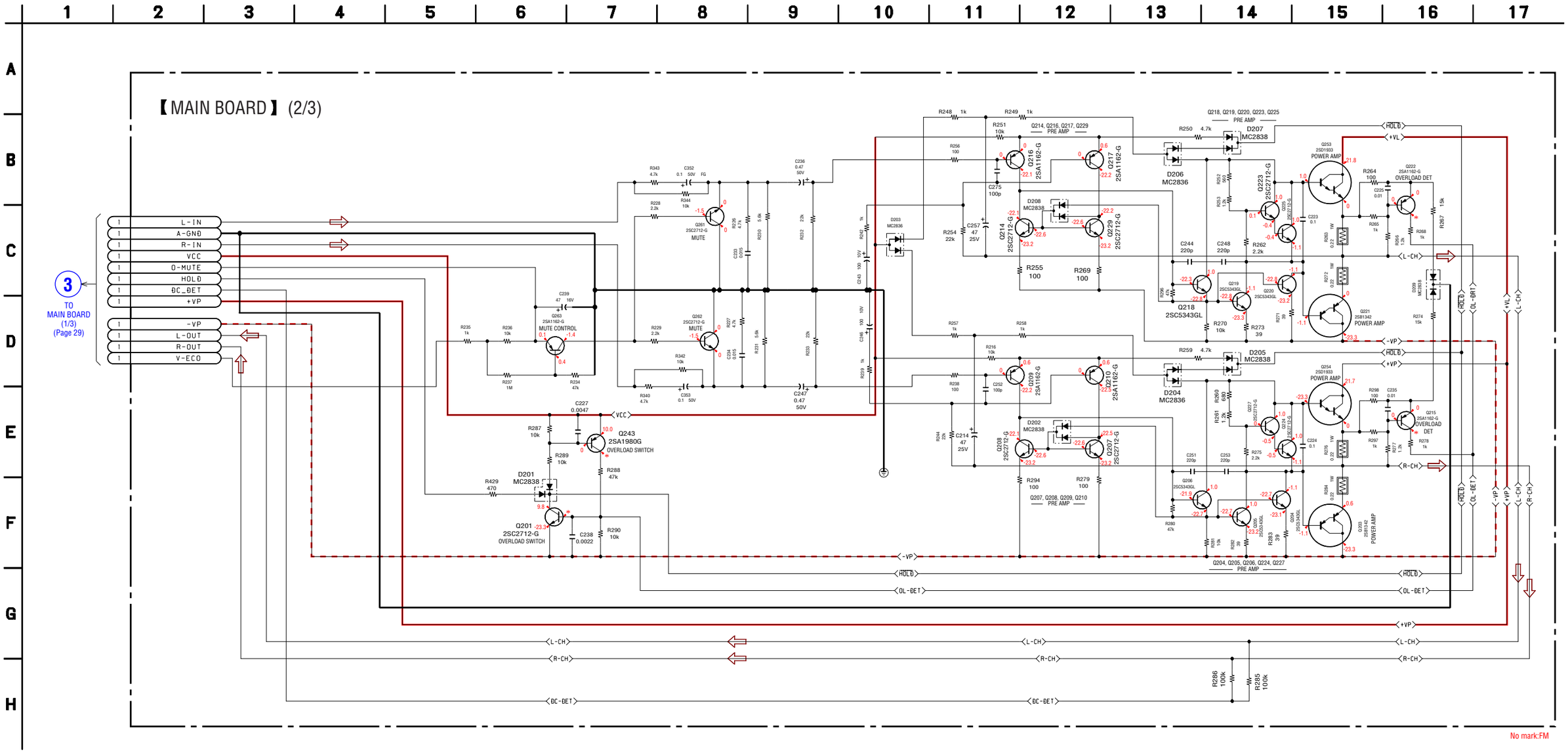
Ref. No.	Location	Ref. No.	Location
D201	H-1	Q217	H-4
D202	H-2	Q218	H-5
D203	I-6	Q219	H-4
D204	H-4	Q220	H-4
D205	H-3	Q221	H-4
D206	H-5	Q222	H-4
D207	H-5	Q223	H-5
D208	H-4	Q224	H-3
D209	H-1	Q225	H-5
D302	E-4	Q227	H-3
D304	E-4	Q229	H-4
D320	D-2	Q243	H-1
D402	F-5	Q253	H-5
D404	F-6	Q254	H-3
D405	F-6	Q261	G-4
D406	F-6	Q262	G-3
D407	F-6	Q263	G-3
D408	D-6	Q301	E-1
D409	D-6	Q302	E-2
D410	D-6	Q303	E-1
D411	D-7	Q304	E-1
D412	D-6	Q305	D-2
D414	I-6	Q306	D-1
D415	I-7	Q307	D-2
D417	F-4	Q308	D-3
D420	G-2	Q309	E-3
D451	H-7	Q310	E-2
D452	H-7	Q311	D-2
D802	C-6	Q312	B-4
D804	C-6	Q401	E-7
D805	C-6	Q402	H-6
D807	G-7	Q403	I-6
D809	H-7	Q405	I-7
		Q406	G-4
IC301	E-4	Q407	F-4
IC503	F-1	Q408	G-2
IC504	F-2	Q409	G-2
		Q411	G-1
Q201	H-1	Q412	G-1
Q203	H-2	Q451	C-7
Q204	H-3	Q452	C-7
Q205	H-3	Q453	C-7
Q206	H-3	Q454	C-7
Q207	G-3	Q801	H-7
Q208	H-3	Q802	H-7
Q209	G-3	Q803	G-7
Q210	G-3	Q804	C-6
Q214	H-4	Q805	C-5
Q215	H-2	Q806	H-7
Q216	H-5	Q807	H-7

7-10. SCHEMATIC DIAGRAM – MAIN SECTION (1/3) –

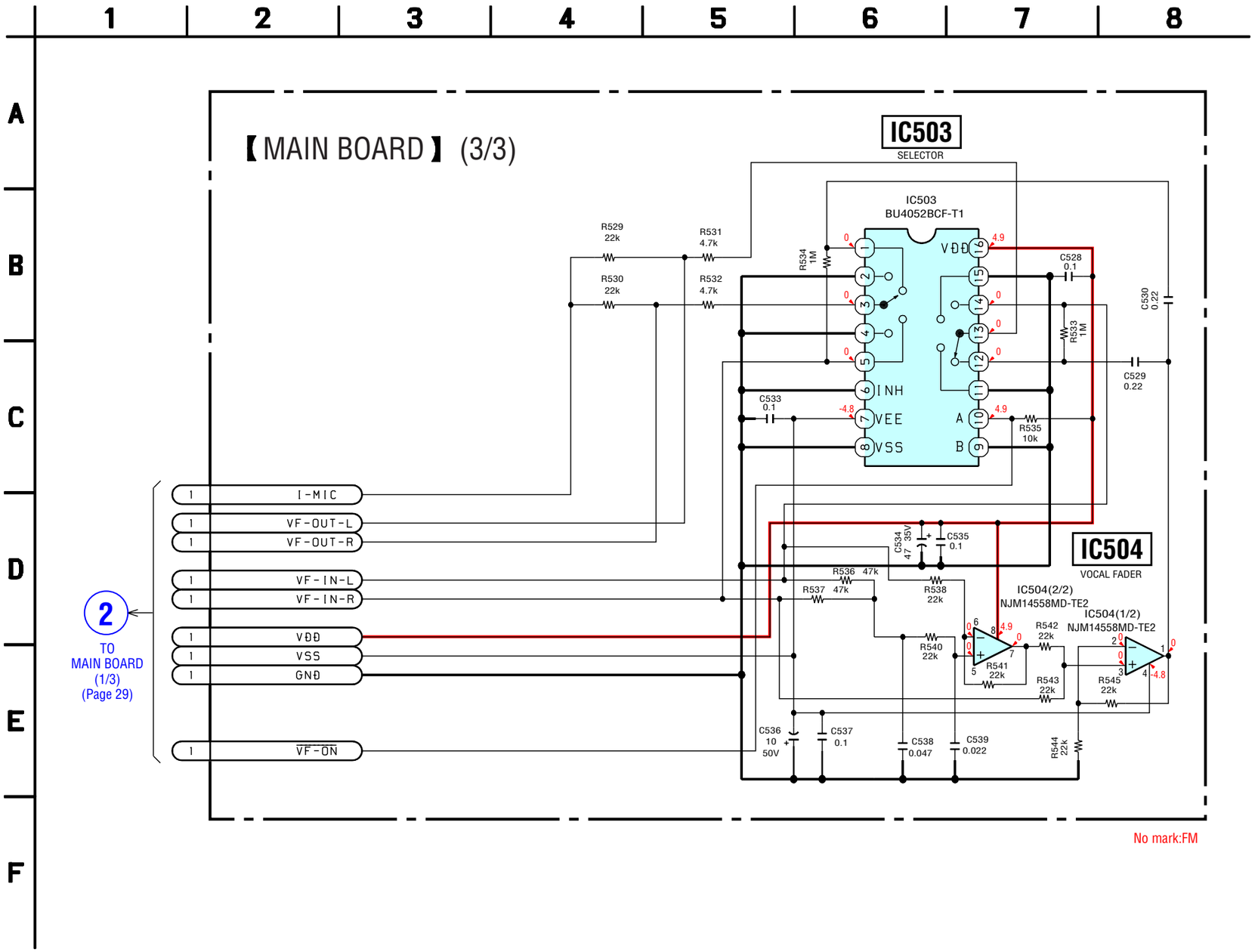
• See page 19 for Waveforms. • See page 39 for IC Block Diagrams.



7-11. SCHEMATIC DIAGRAM – MAIN SECTION (2/3) –

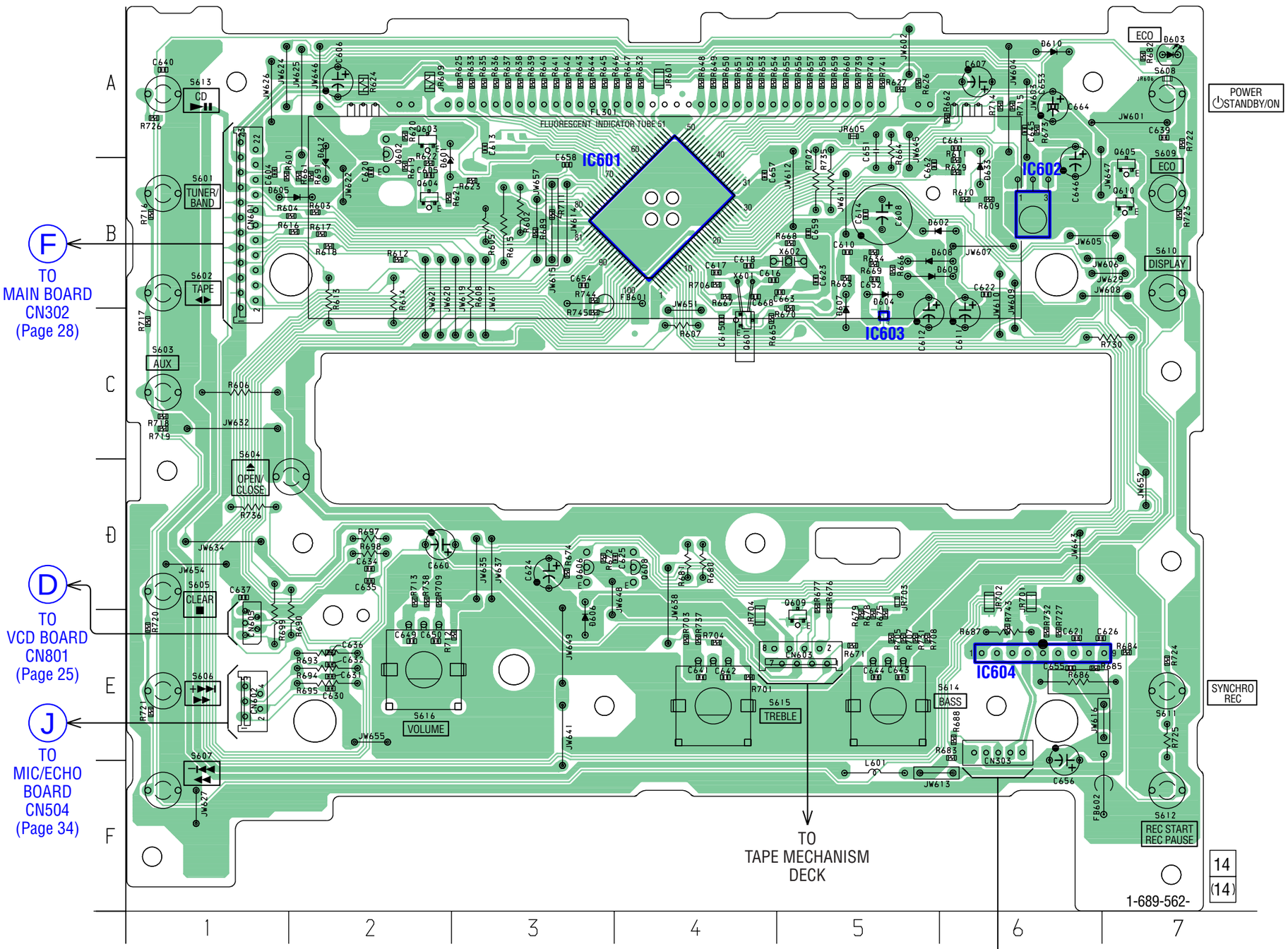


7-12. SCHEMATIC DIAGRAM – MAIN SECTION (3/3) –

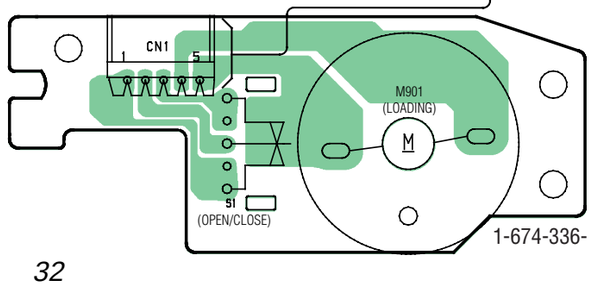


7-13. PRINTED WIRING BOARD – FRONT SECTION – • See page 19 for Circuit Boards Location.

【FRONT BOARD】



【LOADING BOARD】



• **Semiconductor Location**

Ref. No.	Location
D601	A-2
D602	B-5
D603	A-7
D604	B-5
D605	B-2
D606	E-3
D607	B-5
D608	B-5
D609	B-5
D610	A-7
D612	B-2
D633	B-6
IC601	B-3
IC602	B-6
IC603	B-5
IC604	E-6
Q601	C-4
Q602	A-2
Q603	A-2
Q604	B-2
Q605	B-7
Q606	D-3
Q608	D-4
Q609	E-5
Q610	B-7

7-14. SCHEMATIC DIAGRAM – FRONT SECTION –

• See page 19 for Waveforms. • See page 40 for IC Block Diagram. • See page 41 for IC Pin Function Description.

【FRONT BOARD】

CN601 23P

-VFL	23
FIL1	22
FIL2	21
Ð-GNÐ	20
HOLÐ	19
V_ECO	18
+VM	17
REC/PB	16
BIAS	15
CÐ-ON	14
	13
PAMP-MUTE	12
ÐATA (CONT)	11
CLK	10
ÐO	9
DI	8
CE	7
TUNEÐ	6
POWER-ON	5
MUTE	4
VF-ON	3
STREO	2
M-GNÐ	1

F TO MAIN BOARD (1/3) CN302 (Page 29)

VOLTAGE CHART IC601

NO.	VOLT.	NO.	VOLT.	NO.	VOLT.
1	–	41	-28.7	81	0.2(0)
2	–	42	-28.7	82	0(4.6)
3	–	43	-28.7	83	–
4	1.2	44	-28.7	84	0
5	5.1	45	-27.9	85	4.9
6	10.1	46	5.0	86	0
7	–	47	-21.4	87	5.0
8	5.0	48	-27.9	88	5.0
9	0	49	-31.6	89	0
10	0	50	-28.2	90	5.0
11	5.0	51	0	91	–
12	2.2	52	-17.7	92	5.0
13	2.6	53	-14.8	93	5.0
14	0	54	-21.2	94	0.3(5.0)
15	2.6	55	-21.2	95	1.1(5.0)
16	2.6	56	-11.2	96	4.8(5.0)
17	5.1	57	-14.5	97	4.8(5.0)
18	5.2	58	-21.2	98	0
19	5.2	59	-31.6	99	0
20	0	60	-31.6	100	0
21	0	61	-28.1		
22	0	62	-31.6		
23	0	63	-31.6		
24	1.9	64	-28.1		
25	3.3	65	-31.6		
26	5.5	66	-31.6		
27	–	67	–		
28	0	68	–		
29	5.2	69	–		
30	–	70	–		
31	–	71	–		
32	–	72	5.0		
33	–	73	5.0		
34	-28.7	74	5.0		
35	-28.7	75	0		
36	-28.7	76	–		
37	-28.7	77	0		
38	-28.7	78	0		
39	-28.7	79	4.7		
40	-28.7	80	5.0		

FL301
FL, 11-BT-193GNK
FLUORESCENT INDICATOR TUBE

IC602
REMOTE CONTROL RECEIVER
IC602 RPM7138-V4

IC601
SYSTEM CONTROLLER
IC601
LC876756C-52C1-E

C:CMOS
N:N-CH OPEN ÐREIN
□:P-CH OPEN ÐREIN (Hi V)

IC603
RESET
PST3445UL

IC604
MOTOR DRIVER
BA6956AN

IC B/D

TAPE MECHANISM DECK

CN603 8P

RECÐ	8
CAM	7
SOL	6
AUTO	5
GNÐ	4
CST	3
MÐ+B	2
RECA	1
PLAY SW	1
R-REC	2
F-REC	3
PACK	4
MOT+9V	5
SOL 9V	6
COM GNÐ	7
ENÐ SW	8

	SEL1	SEL2	SEL3
Ð	H	H	H
U/LH	H	H	L
HR	H	L	L
K	H	L	H
EZ	L	H	H
V	L	L	H
Ð BASS PLUS	L	L	L

【LOADING BOARD】

CN303 5P ASSY P52.0

1	CLOSE SW
2	Ð-GNÐ
3	OPEN SW
4	MOT-OUT1
5	MOT-OUT2

CN602 5P FFC 1.25

5	NC
4	E-XLT
3	E-ÐATA
2	E-SOCK
1	I-MIC

J TO MIC/ECHO BOARD CN504 (Page 35)

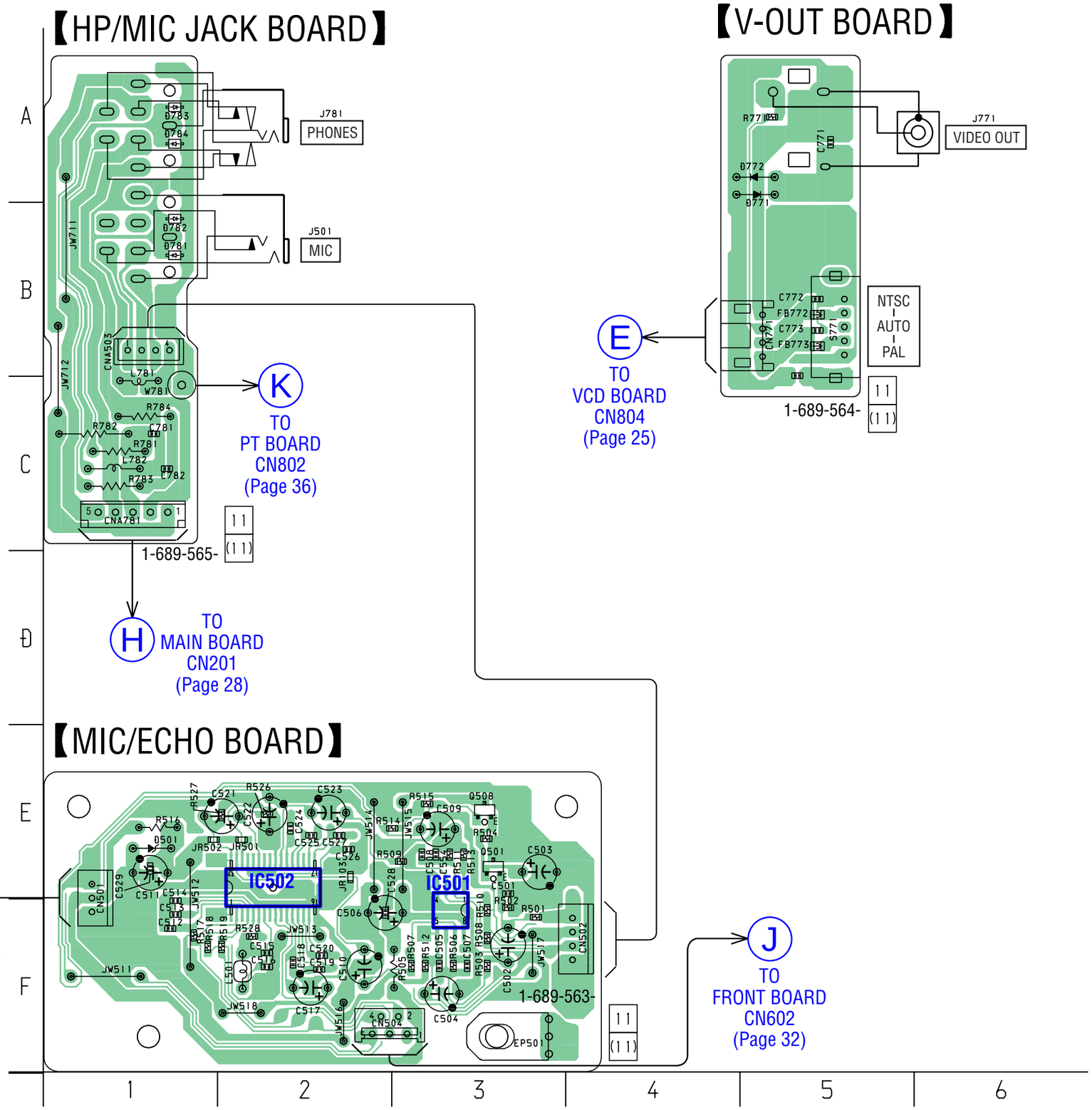
CN605 5P

5	ÐGNÐ
4	I-CÐÐATA
3	O-CÐÐATA
2	I-CÐACK
1	O-CÐSTB

D TO VCD BOARD CN801 (Page 26)

No mark:FM
( ):CD stop

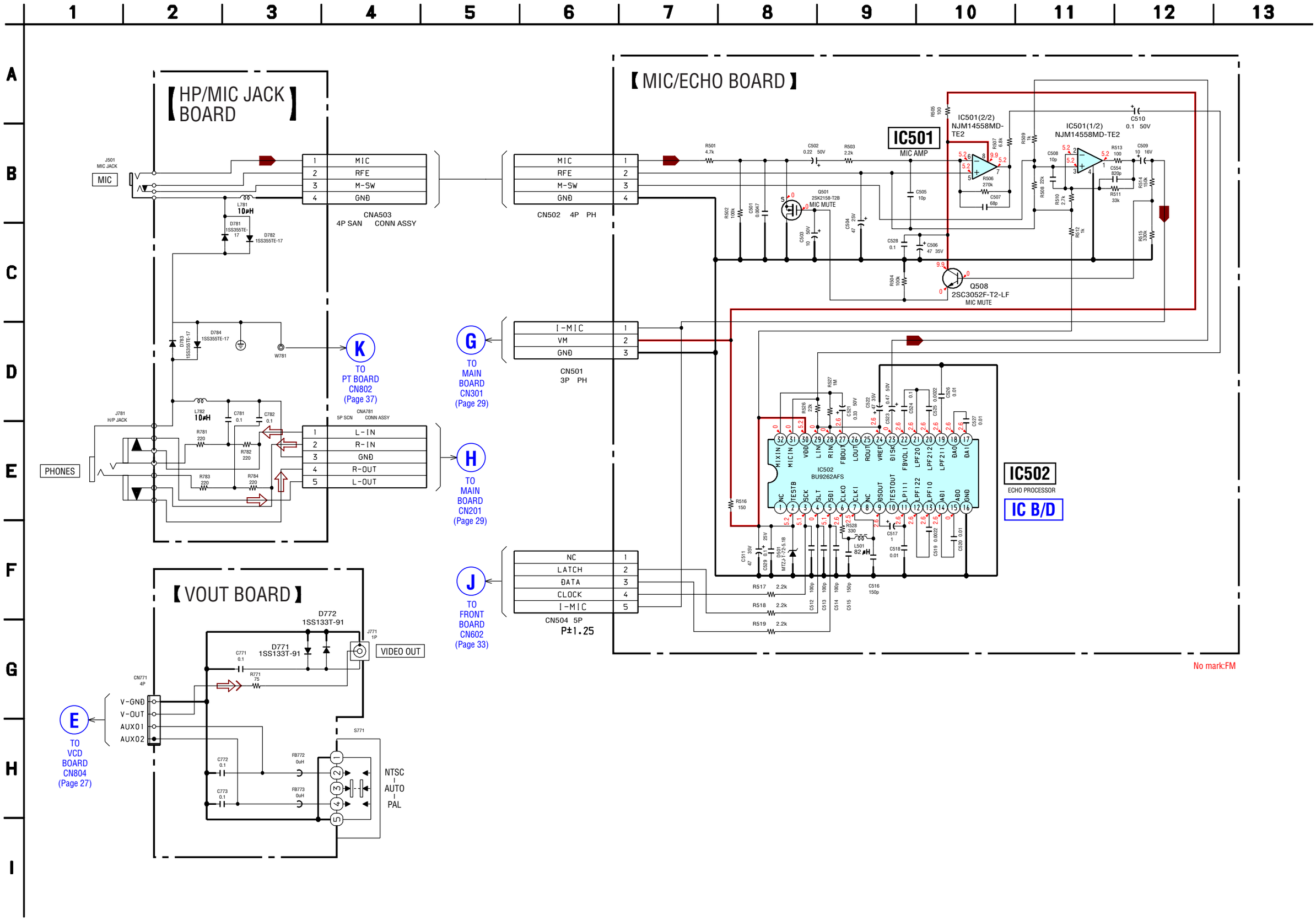
7-15. PRINTED WIRING BOARD – MIC ECHO/JACK SECTION – • See page 19 for Circuit Boards Location.



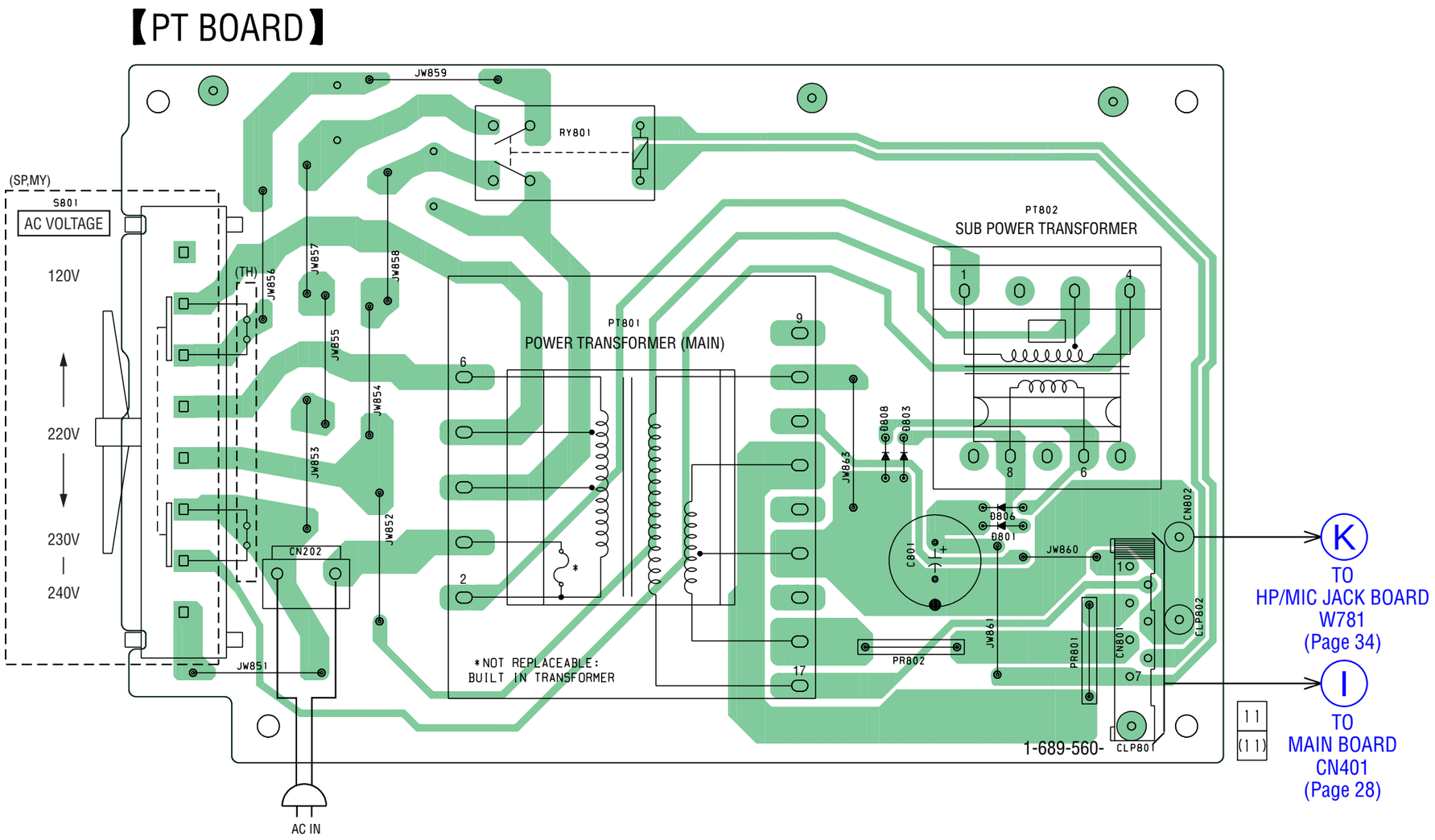
• **Semiconductor Location**

Ref. No.	Location
D501	E-1
D771	A-5
D772	A-5
D781	B-1
D782	B-1
D783	A-1
D784	A-1
IC501	F-3
IC502	E-2
Q501	E-3
Q508	E-3

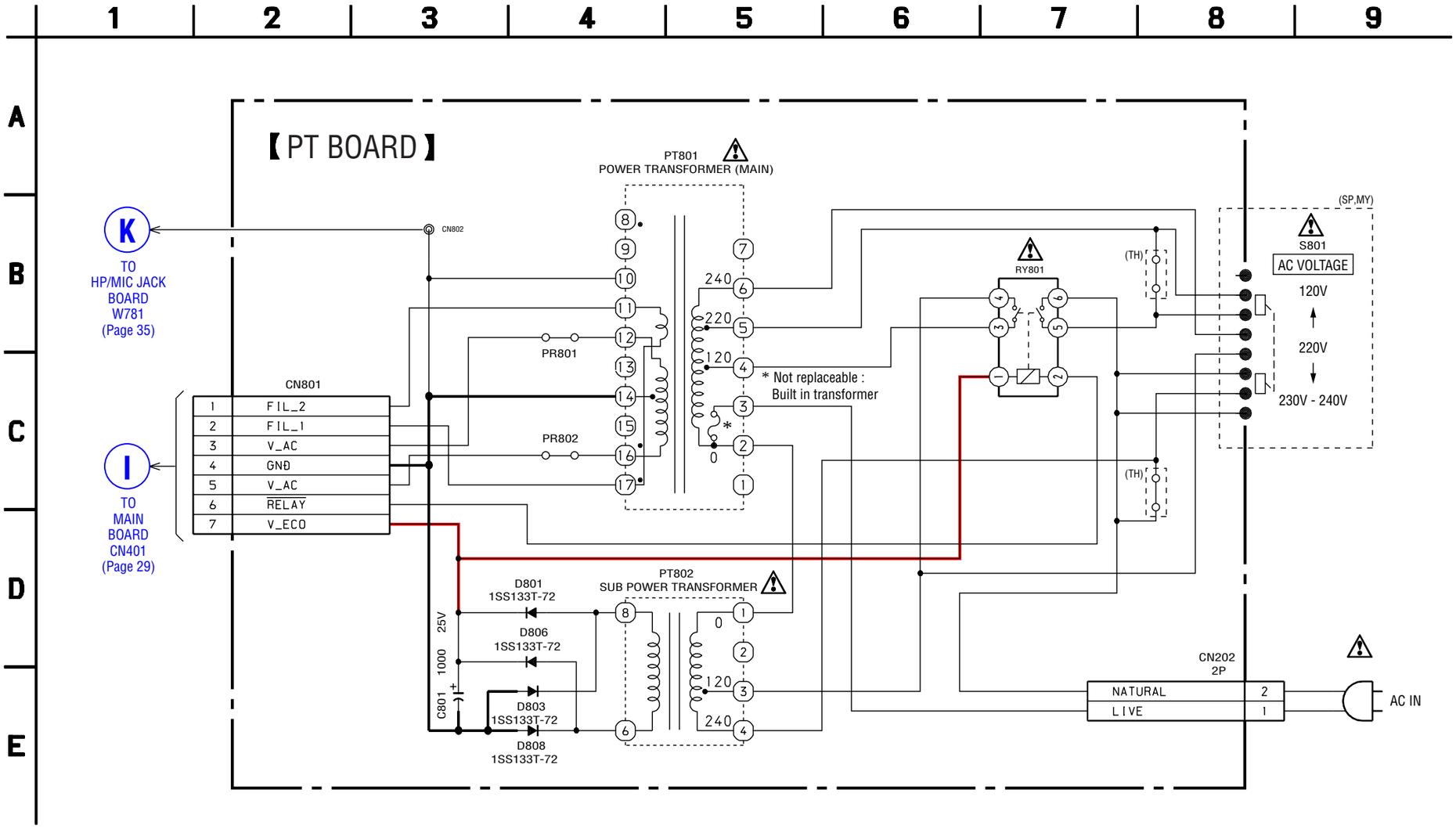
7-16. SCHEMATIC DIAGRAM – MIC ECHO/JACK SECTION – • See page 40 for IC Block Diagram.



7-17. PRINTED WIRING BOARD – POWER SECTION – • See page 19 for Circuit Boards Location.



7-18. SCHEMATIC DIAGRAM – POWER SECTION –

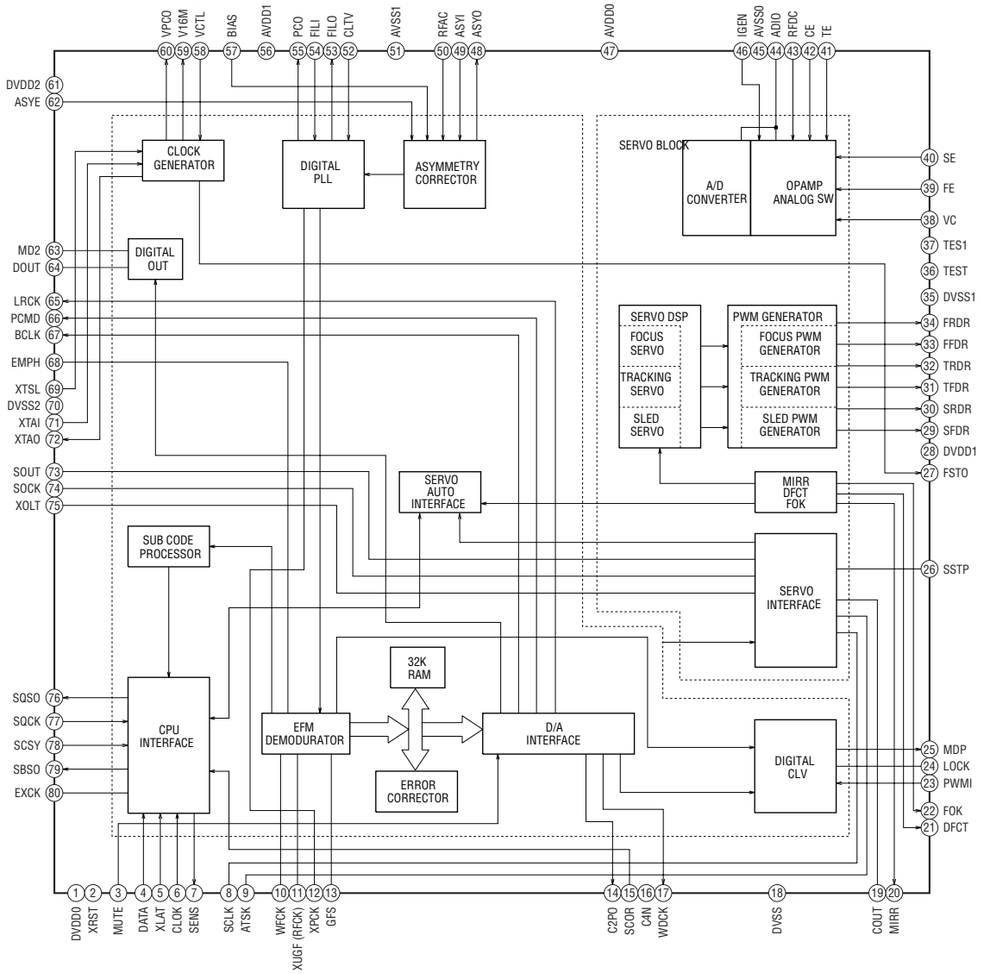


CX-LFAV500

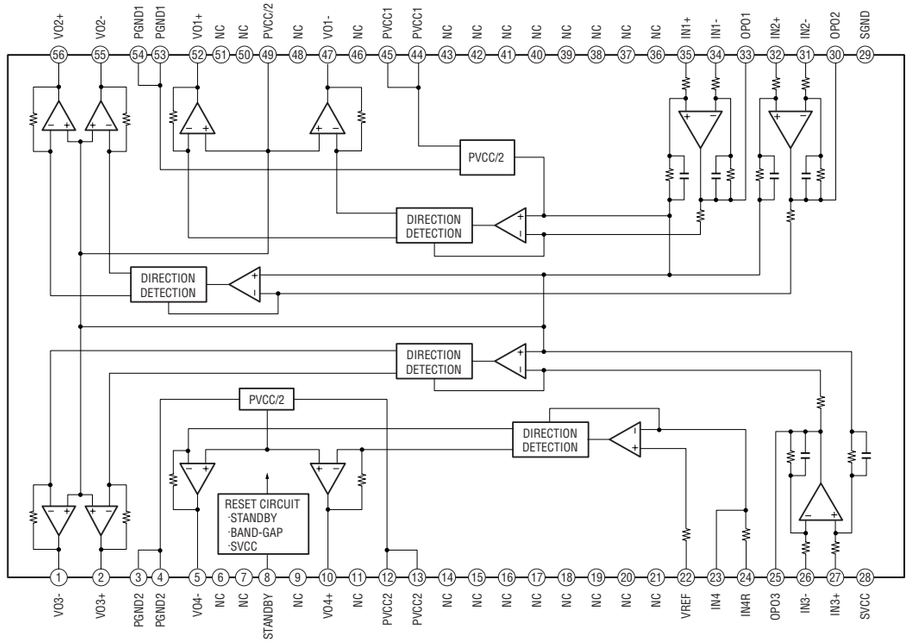
- **IC Block Diagrams**

– BD Board –

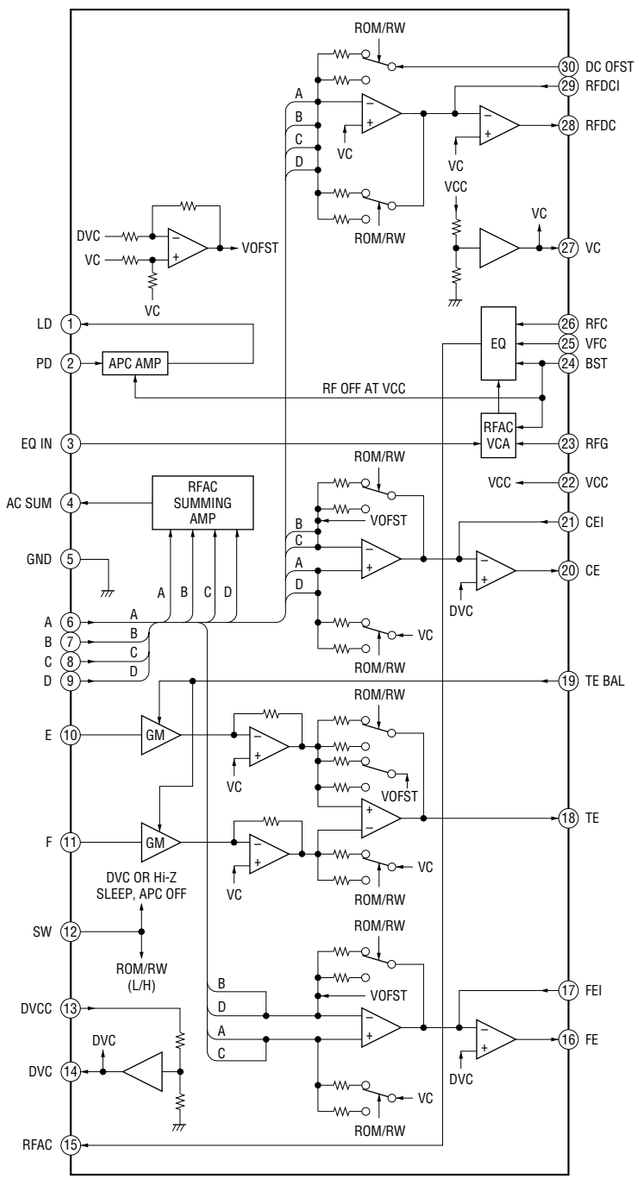
IC101 CXD3068Q



IC102 AN41020A

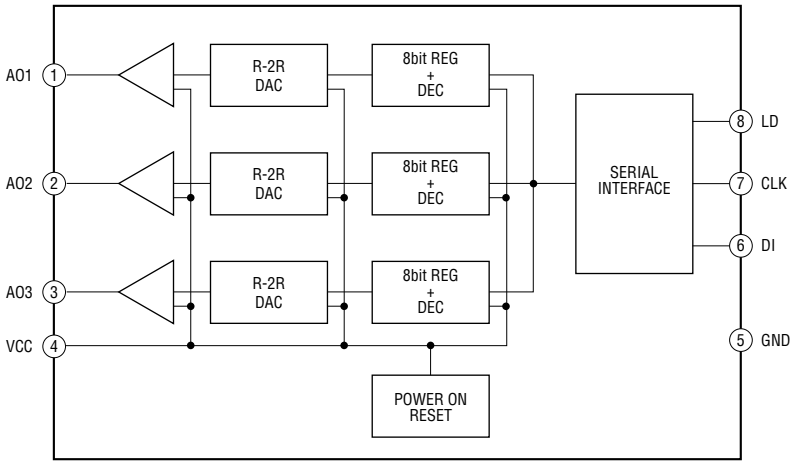


IC103 CXA2647N-T4



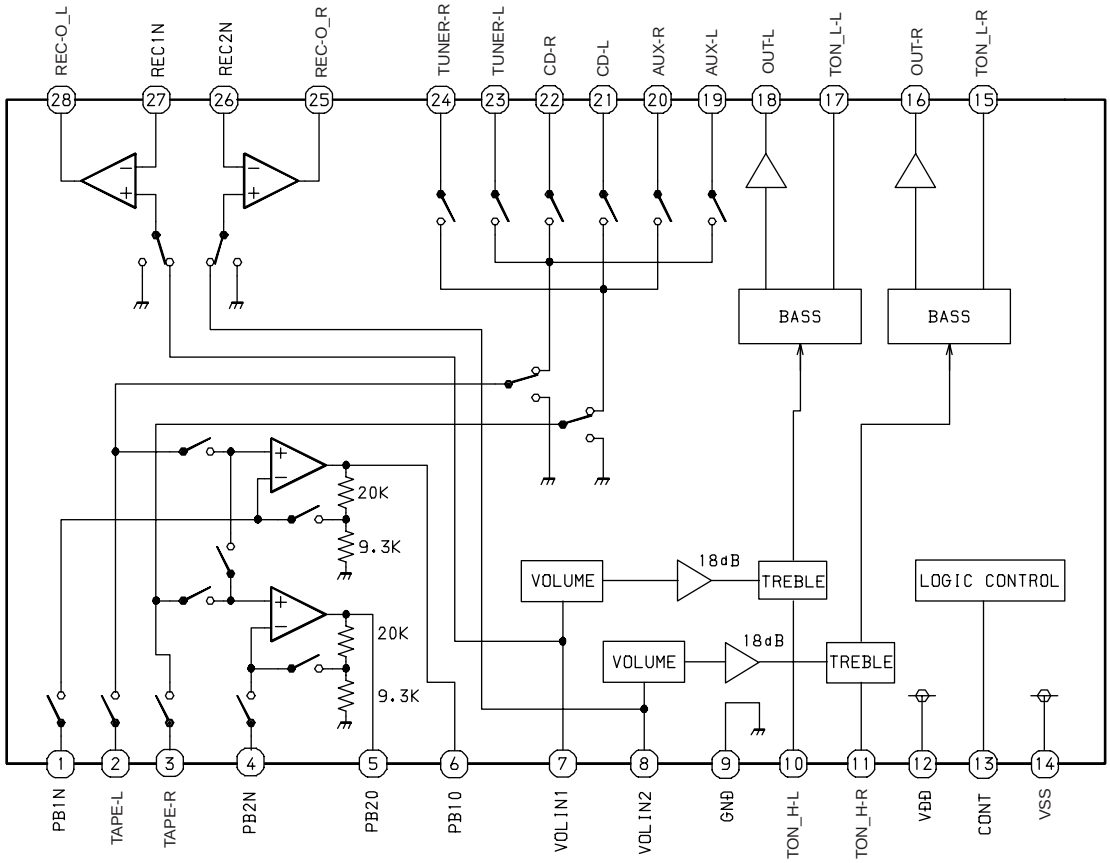
– VCD Board –

IC805 BH2220FVM-TR



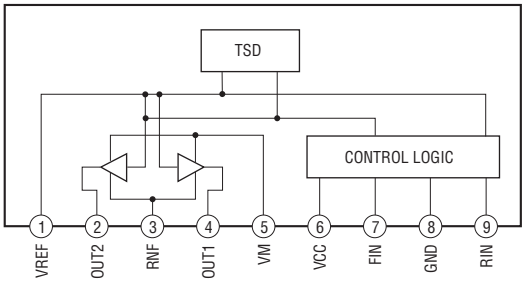
– MAIN Board –

IC301 BD3881FV



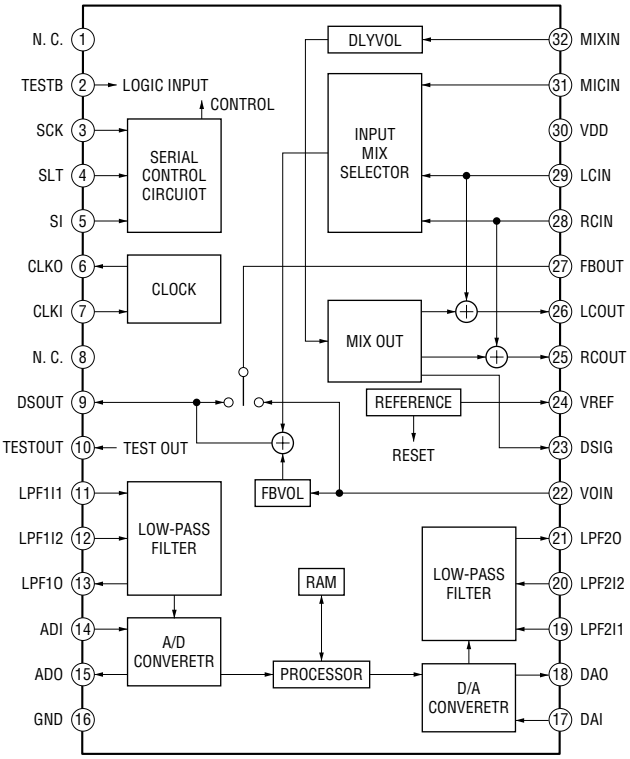
– FRONT Board –

IC604 BA6956AN



– MIC/ECHO Board –

IC502 BU9262AFS



7-19. IC PIN FUNCTION DESCRIPTION

IC601 LC876756C-52C1-E System Controller (FRONT Board)

Pin No.	Pin Name	I/O	Description
1	NC	—	Not used (open)
2	NC	—	Not used (open)
3	NC	—	Not used (open)
4	T-SOL	O	Solenoid control signal output to the tape deck
5	T-END	I	Tape deck reel switch signal input
6	T-MTR.CONT	O	Motor control signal output to the tape deck
7	O-SHIFT	O	Clock shift control signal output
8	P-CON	O	Power relay control signal output
9	P AMP-MUTE	O	Muting control signal output to the power amplifier
10	F-DATA	O	Control signal output to the sound processor
11	I-RESET	I	Reset signal input from the reset IC (IC603)
12	XT1	I	Resonator terminal (32.768kHz)
13	XT2	O	Resonator terminal (32.768kHz)
14	GND.	—	Ground terminal
15	XIN	I	Resonator terminal (8.64MHz)
16	XOUT	O	Resonator terminal (8.64MHz)
17	VDD1	—	Power supply terminal
18	I-KEY1	I	Key AD input 1
19	I-KEY2	I	Key AD input 2
20	BASS ENC INPUT	I	Encoder signal input from the bass encoder
21	TREBLE ENC INPUT	I	Encoder signal input from the treble encoder
22	VOL-ENC	I	Encoder signal input from the volume encoder
23	I-MIC	I	Microphone signal detection signal input
24	T-SW	I	Tape switch status signal input from the tape deck (SW2 to 4)
25	HOLD	I	HOLD detection signal input
26	I-SH DET	I	DC detection and short circuit detection signal input from the power amplifier
27	NC	—	Not used (open)
28	CD-DOOR-SW	I	CD door open/close switch signal input
29	RMC-IN	I	Remote sensor signal input
30 to 33	NC	—	Not used (open)
34 to 44	O-GRID1 to 11	O	Grid signal output to the fluorescent indicator tube
45	O-SEG1	O	Segment signal output to the fluorescent indicator tube
46	VDD3	—	Power supply terminal
47 to 50	O-SEG2 to 5	O	Segment signal output to the fluorescent indicator tube
51	GND.	—	Ground terminal
52 to 66	O-SEG6 to 20	O	Segment signal output to the fluorescent indicator tube
67, 68	NC	—	Not used (open)
69 to 71	I-INI-1 to 3	I	Initial selection signal input
72	VDD4	—	Power supply terminal
73	O-CLOSE	O	CD tray close control signal output
74	O-OPEN	O	CD tray open control signal output
75	LED-CONT	O	Standby LED control signal output
76	O-DSG	O	Not used (open)
77	T-REC	O	REC/PLAY control signal output to the REC/PLAY switch circuit
78	I-INI.BASS+2	—	Not used (fixed at “L”)
79	T-PLAY.SW	I	Play switch signal input from the tape deck
80	R-MUTE	O	Muting signal output to the tuner
81	O-BIAS	O	Bias control signal output to the bias oscillation circuit
82	CD-ON	O	CD power supply control signal output
83	NC	—	Not used (open)

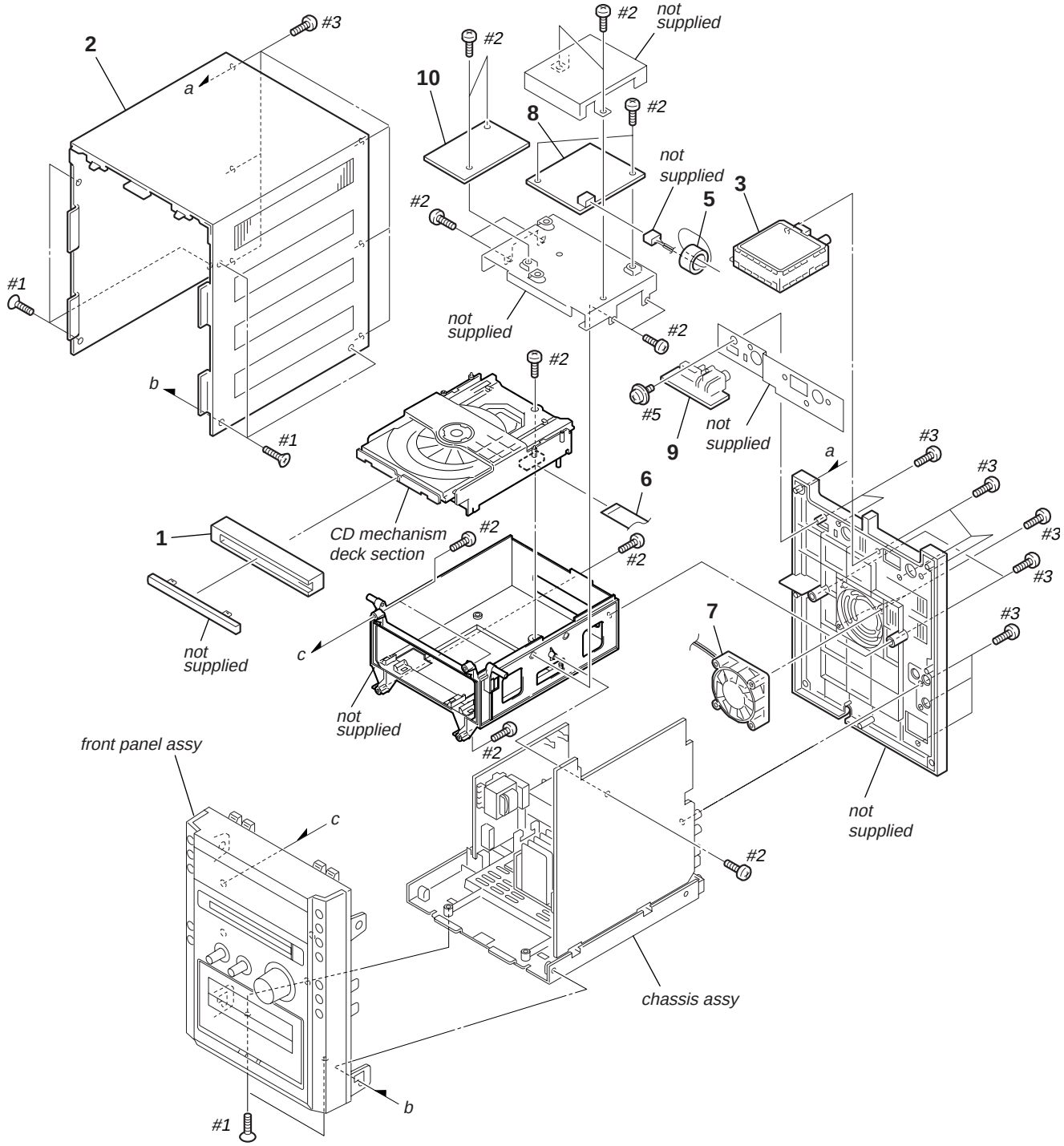
Pin No.	Pin Name	I/O	Description
84	R-CE	O	Tuner chip enable signal output to the tuner
85	$\overline{\text{O-VF-ON}}$	O	Vocal fader on/off control signal output
86	E-XLT	O	Latch signal output to the echo processor (IC502)
87	E-DATA	O	Data output to the echo processor (IC502)
88	E-SQCK	O	Clock output to the echo processor (IC502)
89	VSS2	—	Ground terminal
90	VDD2	—	Power supply terminal
91	NC	—	Not used (open)
92	R-ST	I	Stereo/mono detection signal input from the tuner
93	R-TUNED	I	Tuner tuned status signal input
94	I-CDACK	I	Acknowledge signal input from the video CD circuit
95	I-CDDATA	I	Data input from the video CD circuit
96	O-CD DATA	O	Data output to the video CD circuit
97	O-CDSTB	O	Strobe signal output to the video CD circuit
98	R-DATA	O	Data output to the tuner
99	R-COUNT	I	IF count signal input from the tuner
100	R-CLK	O	Clock signal output to the tuner

SECTION 8
EXPLODED VIEWS

NOTE:
- -XX, -X mean standardized parts, so they may have some differences from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Abbreviation
  MY : Malaysia model
  SP : Singapore model
  TH : Thai model

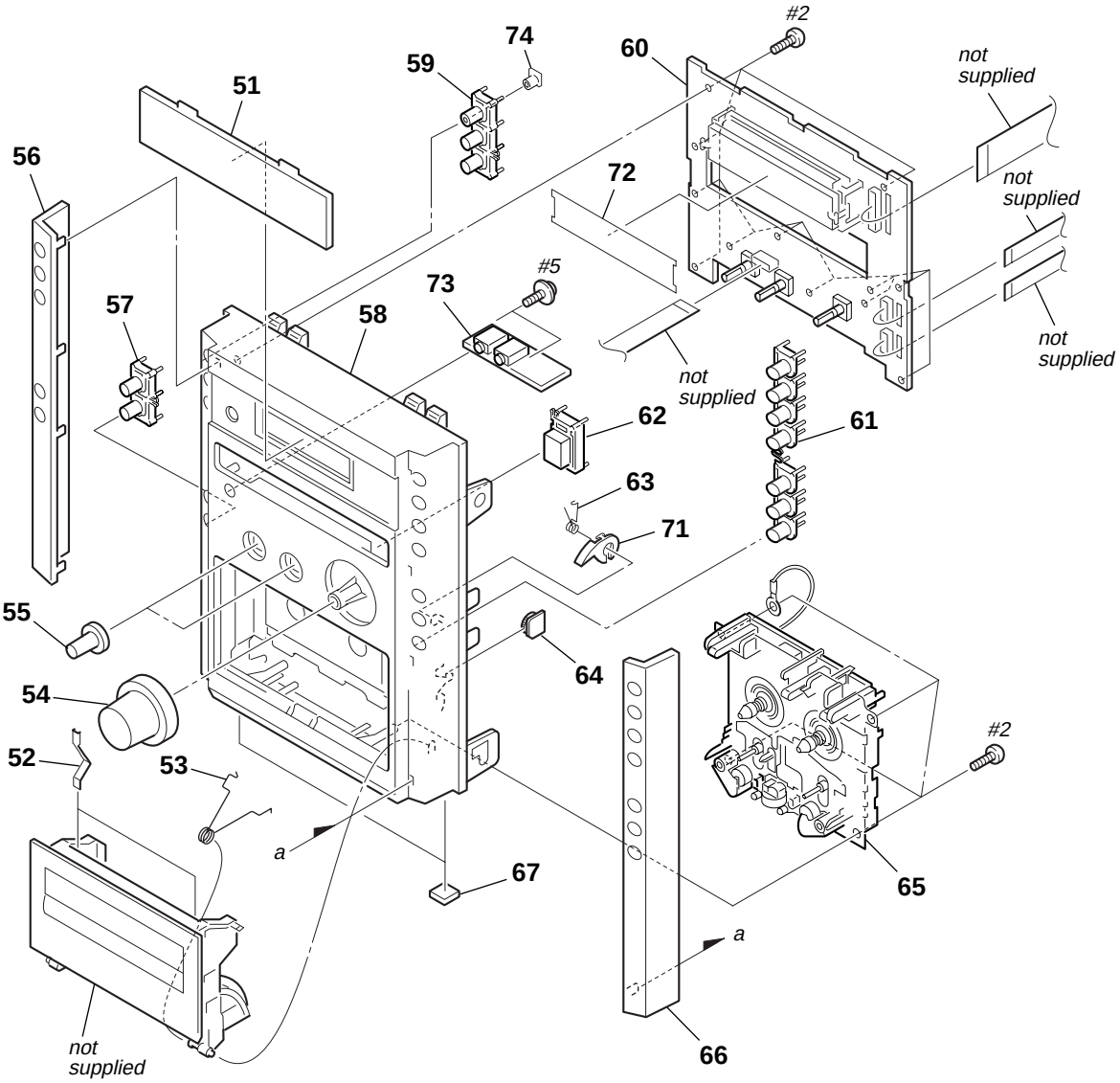
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

8-1. OVERALL SECTION



Ref. No.	Part No.	Description	Remark
1	4-245-218-11	LID,CD	
2	4-247-756-01	CABINET, TOP	
3	1-693-620-11	TUNER (FM/AM)	
5	1-400-285-11	F-BEAD, E2515MRT	
6	1-828-004-11	WIRE (FLAT TYPE) (23 CORE)	
7	1-763-697-21	DC FAN	
8	A-4734-927-A	VCD BOARD, COMPLETE	
9	A-4747-885-A	V-OUT BOARD, COMPLETE	
10	A-4747-883-A	MIC/ECHO BOARD, COMPLETE	
#1	7-685-248-14	SCREW +KTP 3X12 TYPE2 NON-SLIT	
#2	7-685-647-11	SCREW +BVTP 3X10 TYPE2 N-S	
#3	7-685-647-14	SCREW +BVTP 3X10 TYPE2 N-S	
#5	3-229-336-01	SCREW, +BVWH TAPPING	

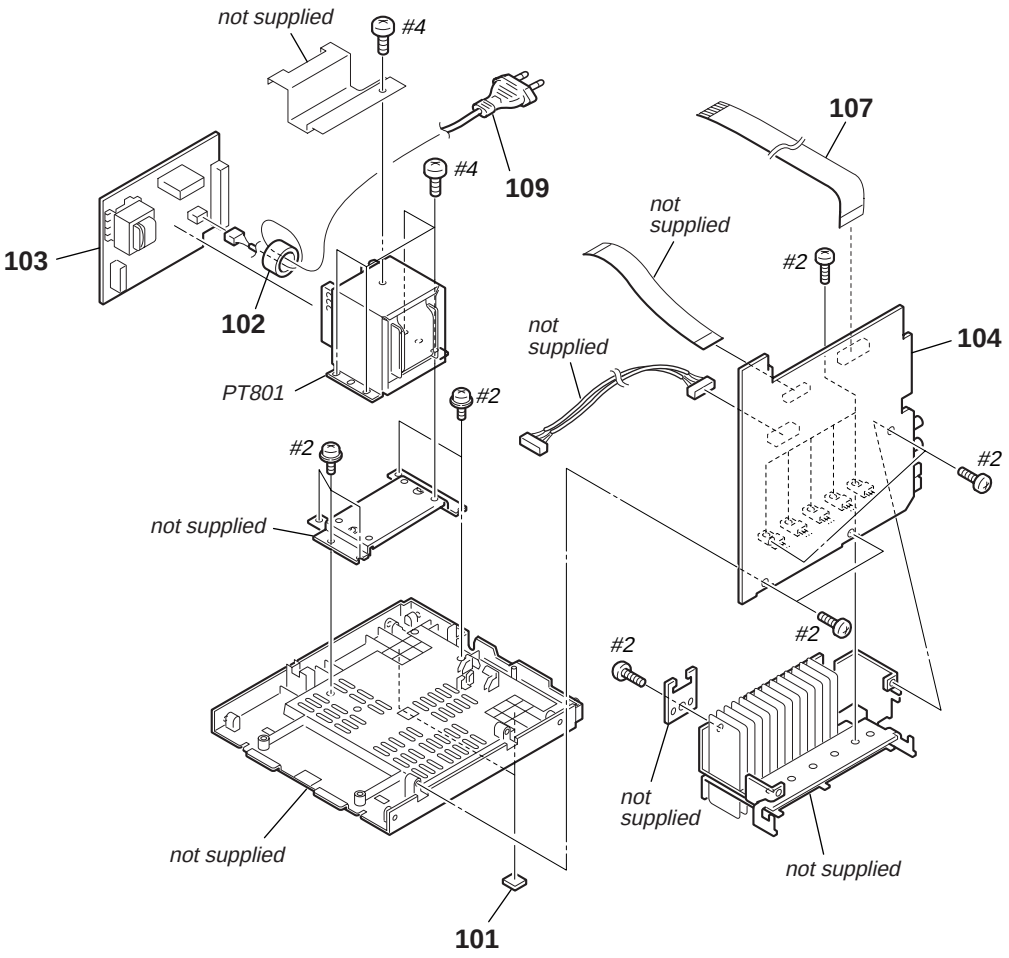
8-2. FRONT SECTION



Ref. No.	Part No.	Description	Remark
51	4-245-227-01	WINDOW,DISPLAY	
52	4-238-631-01	TAPE SPRING	
53	4-247-757-01	SPR-T,CASS	
54	4-245-233-01	KNOB VOL	
55	4-245-223-01	KNOB,B/T	
56	4-245-226-01	PANEL,L	
57	4-245-221-01	BUTTON,REC	
58	4-245-217-21	PANEL, FRONT	
59	4-245-220-01	BUTTON,POWER	
60	A-4747-866-A	FRONT BOARD, COMPLETE (SP,MY)	
60	A-4750-067-A	FRONT BOARD, COMPLETE (TH)	
61	4-245-219-01	BUTTON,FUNCTION	

Ref. No.	Part No.	Description	Remark
62	4-245-222-01	BUTTON,CD	
63	4-231-841-01	SPRING (HEART CAM-B)	
64	4-242-318-01	OIL-DMPR, 70	
65	1-796-351-51	MECHANISM, SINGLE CASSETTE	
66	4-245-225-01	PANEL,R	
67	4-247-752-01	RUBBER, FOOT	
71	4-231-825-01	CAM (B), HEART	
72	4-247-820-01	FILTER, FL	
73	A-4747-888-A	HP/MIC JACK BOARD, COMPLETE	
74	4-245-229-01	HOLDER,LED	
#2	7-685-647-11	SCREW +BVTP 3X10 TYPE2 N-S	
#5	3-229-336-01	SCREW, +BVWH TAPPING	

8-3. CHASSIS SECTION

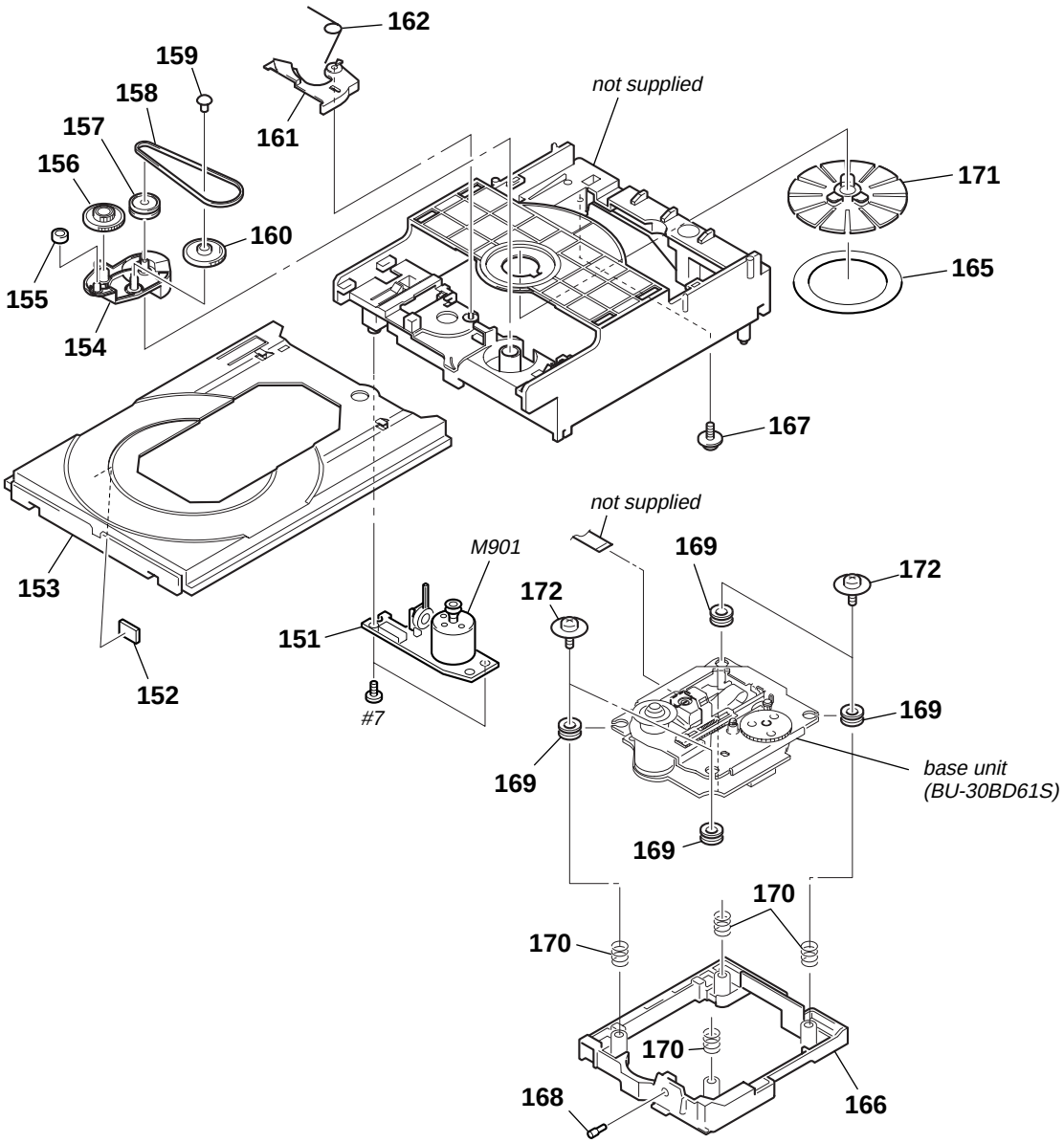


Ref. No.	Part No.	Description	Remark
101	4-247-752-01	RUBBER, FOOT	
102	1-400-285-11	F-BEAD, E2515MRT	
103	1-689-560-11	PT BOARD	
104	A-4747-880-A	MAIN BOARD, COMPLETE (SP,MY)	
104	A-4750-065-A	MAIN BOARD, COMPLETE (TH)	
107	1-823-669-11	WIRE (FLAT TYPE) (11 CORE)	

Ref. No.	Part No.	Description	Remark
⚠109	1-769-744-52	CORD, POWER (SP,MY)	
⚠109	1-824-818-11	CORD, POWER (WITH CONNECTOR) (TH)	
⚠PT801	1-443-096-11	TRANSFORMER, POWER	
#2	7-685-647-11	SCREW +BVTP 3X10 TYPE2 N-S	
#4	7-682-561-09	SCREW +B 4X8	

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

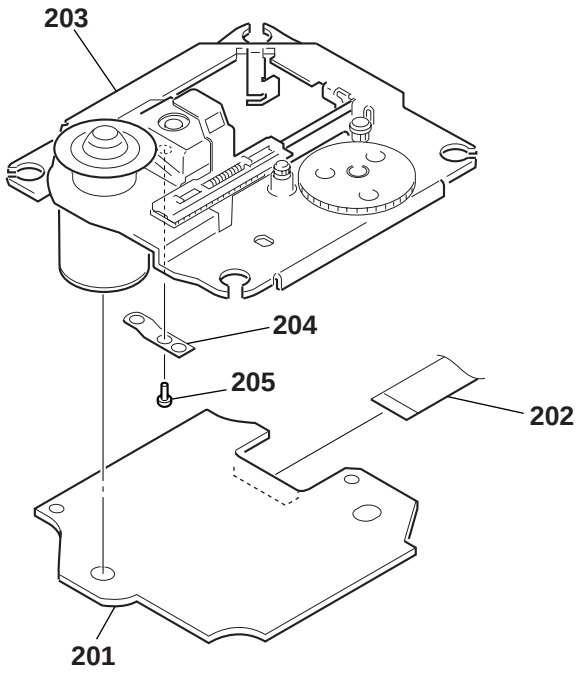
8-4. CD MECHANISM DECK SECTION



Ref. No.	Part No.	Description	Remark
151	1-674-336-12	LOADING BOARD	
152	4-925-315-31	DAMPER	
153	4-224-894-22	TRAY (CDM55D)	
154	4-220-233-01	CAM (CDM55)	
155	4-221-815-11	ROLLER	
156	4-220-237-01	GEAR (A)	
157	4-220-234-01	PULLEY (LDG)	
158	4-221-816-01	BELT (CDM55)	
159	4-227-598-01	SPACER (55)	
160	4-220-238-01	GEAR (B)	
161	4-220-229-02	LEVER (SW)	

Ref. No.	Part No.	Description	Remark
162	4-220-239-01	SPRING, TORSION	
165	4-231-777-02	SHEET (KH2)	
166	4-238-004-01	HOLDER (BU-30), BU	
167	4-985-672-01	SCREW (+PTPWHM2.6), FLOATING	
168	4-229-358-01	SHAFT (BU21)	
169	4-231-451-01	INSULATOR (BU-30)	
170	4-227-045-31	SPRING (INSULATOR), COIL	
171	X-4954-597-1	PULLEY (AT-2) ASSY	
172	4-227-899-01	SCREW (DIA. 12), FROATING	
M901	A-4735-337-A	MOTOR (LD) ASSY	
#7	7-685-533-19	SCREW +BTP 2.6X6 TYPE2 N-S	

8-5. BASE UNIT SECTION



Ref. No.	Part No.	Description	Remark
201	A-4733-498-A	BD BOARD, COMPLETE (A)	
202	1-782-817-11	WIRE (FLAT TYPE) (16 CORE)	
⚠203	A-4735-189-A	BU-30(61)ASSY	
204	4-236-304-02	SPRING (SLED), LEAF	
205	3-372-761-01	SCREW (M1.7), TAPPING	

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

BD

SECTION 9
ELECTRICAL PARTS LIST

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- CAPACITORS:
  uF: µF
- RESISTORS
  All resistors are in ohms.
  METAL: metal-film resistor
  METAL OXIDE: Metal Oxide-film resistor
  F: nonflammable
- COILS
  uH: µH
- SEMICONDUCTORS
  In each case, u: µ, for example:
  uA...: µA... , uPA... , µPA... ,
  uPB... , µPB... , uPC... , µPC... ,
  uPD..., µPD...

When indicating parts by reference number, please include the board name.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

- Abbreviation
  MY : Malaysia model
  SP : Singapore model
  TH : Thai model

Ref. No.	Part No.	Description			Remarks
	A-4733-498-A	BD BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C101	1-164-315-11	CERAMIC CHIP	470PF	5.00%	50V
C102	1-107-826-11	CERAMIC CHIP	0.1uF	10.00%	16V
C103	1-164-315-11	CERAMIC CHIP	470PF	5.00%	50V
C104	1-162-967-11	CERAMIC CHIP	0.0033uF	10%	50V
C107	1-162-921-11	CERAMIC CHIP	33PF	5%	50V
C108	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C109	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C110	1-107-826-11	CERAMIC CHIP	0.1uF	10.00%	16V
C111	1-126-607-11	ELECT CHIP	47uF	20%	4V
C112	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C113	1-128-995-21	ELECT CHIP	100uF	20%	10V
C114	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C115	1-128-995-21	ELECT CHIP	100uF	20%	10V
C116	1-107-826-11	CERAMIC CHIP	0.1uF	10.00%	16V
C117	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C118	1-115-156-11	CERAMIC CHIP	1uF		10V
C119	1-115-156-11	CERAMIC CHIP	1uF		10V
C121	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C122	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C131	1-110-563-11	CERAMIC CHIP	0.068uF	10.00%	16V
C132	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C133	1-125-838-11	CERAMIC CHIP	2.2uF	10%	6.3V
C150	1-128-394-11	ELECT CHIP	220uF	20%	10V
C151	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C152	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C153	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C156	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C202	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C205	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C208	1-216-864-11	METAL CHIP	0	5%	1/16W
C209	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C211	1-107-826-11	CERAMIC CHIP	0.1uF	10.00%	16V
C212	1-162-965-11	CERAMIC CHIP	0.0015uF	10%	50V
C213	1-162-967-11	CERAMIC CHIP	0.0033uF	10%	50V
C215	1-117-863-11	CERAMIC CHIP	0.47uF	10.00%	6.3V
C216	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C222	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C224	1-115-156-11	CERAMIC CHIP	1uF		10V
C226	1-126-607-11	ELECT CHIP	47uF	20%	4V
C227	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C230	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C231	1-128-394-11	ELECT CHIP	220uF	20%	10V
C250	1-216-864-11	METAL CHIP	0	5%	1/16W
C254	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C258	1-162-919-11	CERAMIC CHIP	22PF	5%	50V

Ref. No.	Part No.	Description			Remarks
C272	1-216-864-11	METAL CHIP	0	5%	1/16W
C273	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C277	1-216-864-11	METAL CHIP	0	5%	1/16W
C310	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C313	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C316	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C354	1-216-864-11	METAL CHIP	0	5%	1/16W
		< CONNECTOR >			
CN101	1-794-424-11	CONNECTOR, FCC/FPC 16P			
CN102	1-784-834-21	CONNECTOR,FFC(LIF(NON-ZIF))23P			
CN105	1-784-861-21	CONNECTOR, FFC(LIF(NON-ZIF))9P			
		< FERRITE BEAD >			
FB101	1-216-295-91	SHORT CHIP	0		
FB102	1-216-864-11	METAL CHIP	0	5%	1/16W
FB103	1-216-864-11	METAL CHIP	0	5%	1/16W
FB104	1-216-864-11	METAL CHIP	0	5%	1/16W
* FB161	1-469-670-21	FERRITE	0uH		
FB201	1-216-295-91	SHORT CHIP	0		
FB203	1-216-864-11	METAL CHIP	0	5%	1/16W
FB291	1-216-864-11	METAL CHIP	0	5%	1/16W
		< IC >			
IC101	8-752-408-73	IC CXD3068Q			
IC102	8-759-713-70	IC AN41020A			
IC103	8-752-106-21	IC CXA2647N-T4			
		< JUMPER RESISTOR >			
JR4	1-216-864-11	METAL CHIP	0	5%	1/16W
		< COIL >			
L163	1-216-864-11	METAL CHIP	0	5%	1/16W
		< TRANSISTOR >			
Q101	8-729-046-90	TRANSISTOR	2SB970-(TX).S0		
		< RESISTOR >			
R101	1-216-864-11	METAL CHIP	0	5%	1/16W
R102	1-216-835-11	METAL CHIP	15K	5%	1/16W
R103	1-216-845-11	METAL CHIP	100K	5%	1/16W
R104	1-216-835-11	METAL CHIP	15K	5%	1/16W
R105	1-216-821-11	METAL CHIP	1K	5%	1/16W
R111	1-216-847-11	METAL CHIP	150K	5%	1/16W
R113	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R114	1-216-852-11	METAL CHIP	390K	5%	1/16W
R115	1-216-839-11	METAL CHIP	33K	5%	1/16W
R116	1-216-839-11	METAL CHIP	33K	5%	1/16W

Ref. No.	Part No.	Description			Remarks
R117	1-216-852-11	METAL CHIP	390K	5%	1/16W
R118	1-216-833-11	METAL CHIP	10K	5%	1/16W
R120	1-216-846-11	METAL CHIP	120K	5%	1/16W
R122	1-216-845-11	METAL CHIP	100K	5%	1/16W
R123	1-216-791-11	METAL CHIP	3.3	5%	1/16W
R125	1-216-841-11	METAL CHIP	47K	5%	1/16W
R126	1-216-841-11	METAL CHIP	47K	5%	1/16W
R131	1-216-843-11	METAL CHIP	68K	5%	1/16W
R132	1-216-851-11	METAL CHIP	330K	5%	1/16W
R133	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R151	1-216-845-11	METAL CHIP	100K	5%	1/16W
R152	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R155	1-216-864-11	METAL CHIP	0	5%	1/16W
R166	1-216-864-11	METAL CHIP	0	5%	1/16W
R167	1-216-864-11	METAL CHIP	0	5%	1/16W
R168	1-216-864-11	METAL CHIP	0	5%	1/16W
R169	1-216-864-11	METAL CHIP	0	5%	1/16W
R199	1-216-864-11	METAL CHIP	0	5%	1/16W
R201	1-216-839-11	METAL CHIP	33K	5%	1/16W
R202	1-216-833-11	METAL CHIP	10K	5%	1/16W
R203	1-216-845-11	METAL CHIP	100K	5%	1/16W
R204	1-216-827-11	METAL CHIP	3.3K	5%	1/16W
R205	1-216-821-11	METAL CHIP	1K	5%	1/16W
R206	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R207	1-216-857-11	METAL CHIP	1M	5%	1/16W
R218	1-216-821-11	METAL CHIP	1K	5%	1/16W
R219	1-216-821-11	METAL CHIP	1K	5%	1/16W
R220	1-216-821-11	METAL CHIP	1K	5%	1/16W
R221	1-216-809-11	METAL CHIP	100	5%	1/16W
R222	1-216-809-11	METAL CHIP	100	5%	1/16W
R223	1-216-809-11	METAL CHIP	100	5%	1/16W
R224	1-216-809-11	METAL CHIP	100	5%	1/16W
R225	1-216-809-11	METAL CHIP	100	5%	1/16W
R226	1-216-809-11	METAL CHIP	100	5%	1/16W
R227	1-216-809-11	METAL CHIP	100	5%	1/16W
R230	1-216-811-11	METAL CHIP	150	5%	1/16W
R231	1-216-801-11	METAL CHIP	22	5%	1/16W
R232	1-216-801-11	METAL CHIP	22	5%	1/16W
R233	1-216-801-11	METAL CHIP	22	5%	1/16W
R252	1-216-857-11	METAL CHIP	1M	5%	1/16W
R253	1-216-821-11	METAL CHIP	1K	5%	1/16W
R260	1-216-864-11	METAL CHIP	0	5%	1/16W
R261	1-164-360-11	CERAMIC CHIP	0.1uF		16V
R285	1-216-864-11	METAL CHIP	0	5%	1/16W
R286	1-216-864-11	METAL CHIP	0	5%	1/16W
R287	1-216-864-11	METAL CHIP	0	5%	1/16W
R288	1-216-809-11	METAL CHIP	100	5%	1/16W
R289	1-216-809-11	METAL CHIP	100	5%	1/16W
R290	1-216-809-11	METAL CHIP	100	5%	1/16W
R291	1-216-864-11	METAL CHIP	0	5%	1/16W
R303	1-216-864-11	METAL CHIP	0	5%	1/16W
R308	1-216-864-11	METAL CHIP	0	5%	1/16W
R309	1-216-864-11	METAL CHIP	0	5%	1/16W
R310	1-216-864-11	METAL CHIP	0	5%	1/16W
R311	1-216-864-11	METAL CHIP	0	5%	1/16W
R312	1-216-864-11	METAL CHIP	0	5%	1/16W
R313	1-216-864-11	METAL CHIP	0	5%	1/16W
R316	1-216-864-11	METAL CHIP	0	5%	1/16W
R317	1-216-864-11	METAL CHIP	0	5%	1/16W
R318	1-216-864-11	METAL CHIP	0	5%	1/16W
R320	1-216-864-11	METAL CHIP	0	5%	1/16W

< VARIABLE RESISTOR >

RV101	1-223-997-21	RES, CARBON ADJ VAR 47K			

< VIBRATOR >

X201	1-767-408-21	VIBRATOR, CRYSTAL 16.9344MHz			

****

	A-4747-866-A	FRONT BOARD, COMPLETE (SP,MY)			
		******************************			
	A-4750-067-A	FRONT BOARD, COMPLETE (TH)			
		**************************			
	4-247-818-01	GUIDE (FL)			
	4-247-819-01	HOLDER, SENSOR			

< CAPACITOR >

C604	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C605	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C606	1-126-963-11	ELECT	4.7uF	20.00%	50V
C607	1-126-963-11	ELECT	4.7uF	20.00%	50V
C608	1-126-916-11	ELECT	1000uF	20.00%	6.3V
C610	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C611	1-104-665-11	ELECT	100uF	20.00%	10V
C612	1-124-234-00	ELECT	22uF	20%	16V
C613	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C614	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C615	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C616	1-162-912-11	CERAMIC CHIP	7PF	0.5PF	50V
C617	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C618	1-162-921-11	CERAMIC CHIP	33PF	5%	50V
C620	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C621	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C622	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C623	1-127-804-91	CERAMIC CHIP	100PF	1%	50V
C624	1-126-947-11	ELECT	47uF	20.00%	16V
C625	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C626	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C630	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C631	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C632	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C634	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C635	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C636	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C637	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C639	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C640	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C641	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C642	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C643	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C644	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C645	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C646	1-126-964-11	ELECT	10uF	20.00%	50V
C649	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C650	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V

FRONT

Ref. No.	Part No.	Description			Remarks
C651	1-164-085-11	CERAMIC	0.001uF	10.00%	50V
C652	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C653	1-126-964-11	ELECT	10uF	20.00%	50V
C654	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C655	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C656	1-126-933-11	ELECT	100uF	20.00%	16V
C657	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C658	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C659	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C660	1-126-960-11	ELECT	1uF	20.00%	50V
C661	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C662	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C663	1-162-917-11	CERAMIC CHIP	15PF	5%	50V
C664	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C668	1-162-913-11	CERAMIC CHIP	8PF	0.50PF	50V
		< CONNECTOR >			
CN601	1-784-784-11	CONNECTOR, FFC 23P			
CN602	1-784-766-11	CONNECTOR, FFC 5P			
CN603	1-691-040-31	CONNECTOR, FFC 8P			
CN605	1-779-273-11	CONNECTOR, FFC(LIF(NON-ZIF))5P			
		< DIODE >			
D601	8-719-109-89	DIODE MTZJ-T-77-5.6B			
D602	8-719-991-33	DIODE 1SS133T-72			
D603	8-719-059-98	DIODE SLR-342VCT31 (ECO)			
D604	8-719-991-33	DIODE 1SS133T-72			
D605	8-719-991-33	DIODE 1SS133T-72			
D606	8-719-991-33	DIODE 1SS133T-72			
D607	8-719-991-33	DIODE 1SS133T-72			
D608	8-719-989-91	DIODE 1N4148A-T265			
D609	8-719-989-91	DIODE 1N4148A-T265			
D610	8-719-991-33	DIODE 1SS133T-72			
D612	8-719-110-23	DIODE MTZJ-T-72-11C			
D633	8-719-991-33	DIODE 1SS133T-72			
		< FERRITE BEAD >			
FB601	1-412-473-21	INDUCTOR	0uH		
FB602	1-412-473-21	INDUCTOR	0uH		
		< FILTER >			
FL301	1-518-886-11	INDICATOR TUBE, FLUORESCENT			
		< IC >			
IC601	6-803-570-01	IC LC876756C-52C1-E			
IC602	6-600-092-01	IC RPM7138-V4			
IC603	6-700-250-01	IC PST3445UL			
IC604	8-759-598-69	IC BA6956AN			
		< JUMPER RESISTOR >			
JR103	1-216-864-11	METAL CHIP	0	5%	1/16W
JR601	1-216-296-11	SHORT CHIP	0		
JR602	1-216-864-11	METAL CHIP	0	5%	1/16W
JR603	1-216-864-11	METAL CHIP	0	5%	1/16W
JR604	1-216-296-11	SHORT CHIP	0		
JR606	1-216-296-11	SHORT CHIP	0		
JR609	1-216-296-11	SHORT CHIP	0		

Ref. No.	Part No.	Description			Remarks
JR701	1-216-296-11	SHORT CHIP	0		
JR702	1-216-296-11	SHORT CHIP	0		
JR703	1-216-864-11	METAL CHIP	0	5%	1/16W
JR704	1-216-864-11	METAL CHIP	0	5%	1/16W
		< COIL >			
L601	1-408-117-00	INDUCTOR	10uH		
		< TRANSISTOR >			
Q601	8-729-230-49	TRANSISTOR	2SC2712L-TE85R		
Q602	6-550-296-01	TRANSISTOR	2SA1980G		
Q603	8-729-230-49	TRANSISTOR	2SC2712L-TE85R		
Q604	8-729-230-49	TRANSISTOR	2SC2712L-TE85R		
Q605	8-729-901-46	TRANSISTOR	DTA114YK-T146		
Q606	6-550-305-01	TRANSISTOR	2SA1296GR-(TPE2)		
Q608	6-550-297-01	TRANSISTOR	2SA1981Y		
Q609	8-729-900-53	TRANSISTOR	DTC114EKA-T146		
Q610	8-729-027-44	TRANSISTOR	DTC114TK-T146		
		< RESISTOR >			
R601	1-216-823-11	METAL CHIP	1.5K	5%	1/16W
R602	1-249-417-11	CARBON	1K	5%	1/4W F
R603	1-216-821-11	METAL CHIP	1K	5%	1/16W
R604	1-216-809-11	METAL CHIP	100	5%	1/16W
R605	1-249-429-11	CARBON	10K	5%	1/4W
R606	1-249-385-11	CARBON	2.2	5%	1/6W F
R607	1-247-807-31	CARBON	100	5%	1/4W
R608	1-247-807-31	CARBON	100	5%	1/4W
R609	1-216-850-11	METAL CHIP	270K	5%	1/16W
R610	1-216-835-11	METAL CHIP	15K	5%	1/16W
R611	1-216-853-11	METAL CHIP	470K	5%	1/16W
R612	1-216-864-11	METAL CHIP	0	5%	1/16W
R613	1-249-417-11	CARBON	1K	5%	1/4W F
R614	1-249-417-11	CARBON	1K	5%	1/4W F
R615	1-249-417-11	CARBON	1K	5%	1/4W F
R616	1-216-864-11	METAL CHIP	0	5%	1/16W
R617	1-216-809-11	METAL CHIP	100	5%	1/16W
R618	1-216-809-11	METAL CHIP	100	5%	1/16W
R619	1-216-845-11	METAL CHIP	100K	5%	1/16W
R620	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R621	1-216-821-11	METAL CHIP	1K	5%	1/16W
R622	1-216-835-11	METAL CHIP	15K	5%	1/16W
R623	1-216-817-11	METAL CHIP	470	5%	1/16W
R624	1-216-222-00	RES-CHIP	10K	5%	1/8W
R625	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R626	1-216-833-11	METAL CHIP	10K	5%	1/16W
R627	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R629	1-216-821-11	METAL CHIP	1K	5%	1/16W
R632	1-216-845-11	METAL CHIP	100K	5%	1/16W
R633	1-216-845-11	METAL CHIP	100K	5%	1/16W
R634	1-216-833-11	METAL CHIP	10K	5%	1/16W
R635	1-216-845-11	METAL CHIP	100K	5%	1/16W
R636	1-216-845-11	METAL CHIP	100K	5%	1/16W
R637	1-216-845-11	METAL CHIP	100K	5%	1/16W
R638	1-216-845-11	METAL CHIP	100K	5%	1/16W
R639	1-216-845-11	METAL CHIP	100K	5%	1/16W
R640	1-216-845-11	METAL CHIP	100K	5%	1/16W

Ref. No.	Part No.	Description			Remarks
R641	1-216-845-11	METAL CHIP	100K	5%	1/16W
R642	1-216-845-11	METAL CHIP	100K	5%	1/16W
R643	1-216-845-11	METAL CHIP	100K	5%	1/16W
R644	1-216-845-11	METAL CHIP	100K	5%	1/16W
R645	1-216-845-11	METAL CHIP	100K	5%	1/16W
R646	1-216-845-11	METAL CHIP	100K	5%	1/16W
R647	1-216-845-11	METAL CHIP	100K	5%	1/16W
R648	1-216-845-11	METAL CHIP	100K	5%	1/16W
R649	1-216-845-11	METAL CHIP	100K	5%	1/16W
R650	1-216-845-11	METAL CHIP	100K	5%	1/16W
R651	1-216-845-11	METAL CHIP	100K	5%	1/16W
R652	1-216-845-11	METAL CHIP	100K	5%	1/16W
R653	1-216-845-11	METAL CHIP	100K	5%	1/16W
R654	1-216-845-11	METAL CHIP	100K	5%	1/16W
R655	1-216-845-11	METAL CHIP	100K	5%	1/16W
R656	1-216-845-11	METAL CHIP	100K	5%	1/16W
R657	1-216-845-11	METAL CHIP	100K	5%	1/16W
R658	1-216-845-11	METAL CHIP	100K	5%	1/16W
R659	1-216-845-11	METAL CHIP	100K	5%	1/16W
R660	1-216-845-11	METAL CHIP	100K	5%	1/16W
R661	1-216-844-11	METAL CHIP	82K	5%	1/16W
R662	1-216-841-11	METAL CHIP	47K	5%	1/16W
R663	1-216-841-11	METAL CHIP	47K	5%	1/16W
R664	1-249-433-11	CARBON	22K	5%	1/4W
R665	1-216-841-11	METAL CHIP	47K	5%	1/16W
R666	1-216-821-11	METAL CHIP	1K	5%	1/16W
R667	1-216-853-11	METAL CHIP	470K	5%	1/16W
R668	1-216-809-11	METAL CHIP	100	5%	1/16W
R669	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R670	1-216-833-11	METAL CHIP	10K	5%	1/16W
R671	1-216-841-11	METAL CHIP	47K	5%	1/16W
R672	1-216-841-11	METAL CHIP	47K	5%	1/16W
R673	1-216-864-11	METAL CHIP	0	5%	1/16W
R674	1-216-833-11	METAL CHIP	10K	5%	1/16W
R675	1-216-841-11	METAL CHIP	47K	5%	1/16W
R676	1-216-837-11	METAL CHIP	22K	5%	1/16W
R677	1-216-839-11	METAL CHIP	33K	5%	1/16W
R678	1-216-837-11	METAL CHIP	22K	5%	1/16W
R679	1-216-837-11	METAL CHIP	22K	5%	1/16W
R680	1-249-417-11	CARBON	1K	5%	1/4W F
R681	1-249-417-11	CARBON	1K	5%	1/4W F
R682	1-216-827-11	METAL CHIP	3.3K	5%	1/16W
R683	1-216-838-11	METAL CHIP	27K	5%	1/16W
R684	1-216-830-11	METAL CHIP	5.6K	5%	1/16W
R685	1-216-845-11	METAL CHIP	100K	5%	1/16W
R686	1-249-480-11	CARBON	3.3	5%	1/2W
R687	1-249-426-11	CARBON	5.6K	5%	1/4W
R688	1-216-833-11	METAL CHIP	10K	5%	1/16W
R689	1-216-821-11	METAL CHIP	1K	5%	1/16W
R690	1-249-417-11	CARBON	1K	5%	1/4W F
R691	1-216-821-11	METAL CHIP	1K	5%	1/16W
R693	1-249-417-11	CARBON	1K	5%	1/4W F
R694	1-249-417-11	CARBON	1K	5%	1/4W F
R695	1-249-417-11	CARBON	1K	5%	1/4W F
R697	1-249-417-11	CARBON	1K	5%	1/4W F
R698	1-249-417-11	CARBON	1K	5%	1/4W F
R699	1-249-417-11	CARBON	1K	5%	1/4W F
R701	1-216-833-11	METAL CHIP	10K	5%	1/16W
R702	1-249-417-11	CARBON	1K	5%	1/4W F
R703	1-216-837-11	METAL CHIP	22K	5%	1/16W
R704	1-216-833-11	METAL CHIP	10K	5%	1/16W
R705	1-216-833-11	METAL CHIP	10K	5%	1/16W
R706	1-219-570-11	METAL CHIP	10M	5%	1/10W
R707	1-216-833-11	METAL CHIP	10K	5%	1/16W
R708	1-216-837-11	METAL CHIP	22K	5%	1/16W
R709	1-216-833-11	METAL CHIP	10K	5%	1/16W (SP,MY)
R711	1-216-845-11	METAL CHIP	100K	5%	1/16W
R712	1-216-833-11	METAL CHIP	10K	5%	1/16W
R713	1-216-837-11	METAL CHIP	22K	5%	1/16W (SP,MY)
R714	1-216-833-11	METAL CHIP	10K	5%	1/16W
R715	1-216-833-11	METAL CHIP	10K	5%	1/16W
R716	1-216-823-11	METAL CHIP	1.5K	5%	1/16W
R717	1-216-824-11	METAL CHIP	1.8K	5%	1/16W
R718	1-216-826-11	METAL CHIP	2.7K	5%	1/16W
R719	1-216-828-11	METAL CHIP	3.9K	5%	1/16W
R720	1-218-867-11	METAL CHIP	6.8K	5%	1/10W
R721	1-216-832-11	METAL CHIP	8.2K	5%	1/16W
R722	1-216-823-11	METAL CHIP	1.5K	5%	1/16W
R723	1-216-824-11	METAL CHIP	1.8K	5%	1/16W
R724	1-216-826-11	METAL CHIP	2.7K	5%	1/16W
R725	1-249-424-11	CARBON	3.9K	5%	1/4W F
R726	1-218-867-11	METAL CHIP	6.8K	5%	1/10W
R727	1-216-845-11	METAL CHIP	100K	5%	1/16W
R730	1-249-417-11	CARBON	1K	5%	1/4W F
R731	1-216-833-11	METAL CHIP	10K	5%	1/16W
R732	1-216-830-11	METAL CHIP	5.6K	5%	1/16W
R735	1-249-417-11	CARBON	1K	5%	1/4W F
R736	1-249-417-11	CARBON	1K	5%	1/4W F
R737	1-216-833-11	METAL CHIP	10K	5%	1/16W
R738	1-216-833-11	METAL CHIP	10K	5%	1/16W
R739	1-216-845-11	METAL CHIP	100K	5%	1/16W
R740	1-216-845-11	METAL CHIP	100K	5%	1/16W
R741	1-216-845-11	METAL CHIP	100K	5%	1/16W
R743	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R744	1-216-845-11	METAL CHIP	100K	5%	1/16W
R745	1-216-845-11	METAL CHIP	100K	5%	1/16W

< SWITCH >

S601	1-771-410-21	SWITCH, TACTILE (TUNER/BAND)
S602	1-771-410-21	SWITCH, TACTILE (TAPE ◀▶)
S603	1-771-410-21	SWITCH, TACTILE (AUX)
S604	1-771-410-21	SWITCH, TACTILE (⏏OPEN/CLOSE)
S605	1-771-410-21	SWITCH, TACTILE (CLEAR ■)
S606	1-771-410-21	SWITCH, TACTILE (+▶▶I▶▶)
S607	1-771-410-21	SWITCH, TACTILE (-I◀◀ ◀◀)
S608	1-771-410-21	SWITCH, TACTILE (POWER/⏻STANDBY/ON)
S609	1-771-410-21	SWITCH, TACTILE (ECO)
S610	1-771-410-21	SWITCH, TACTILE (DISPLAY)
S611	1-771-410-21	SWITCH, TACTILE (SYNCHRO REC)
S612	1-771-410-21	SWITCH, TACTILE (REC START/REC PAUSE)
S613	1-771-410-21	SWITCH, TACTILE (CD▶II)
S614	1-786-395-11	SW, RTRY RE0123PVB25FINA 1-2 (BASS)
S615	1-786-395-11	SW, RTRY RE0123PVB25FINA 1-2 (TREBLE)
S616	1-477-823-11	ENCODER, ROTARY (VOLUME)

Ref. No.	Part No.	Description			Remarks
		< VIBRATOR >			
X601	9-300-001-87	VIB,XTAL 32.768kHz CFS-308 CT			
X602	1-795-880-11	VIBRATOR, CERAMIC 8.64MHz			
**********					
	A-4747-888-A	HP/MIC JACK BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C781	1-107-826-11	CERAMIC CHIP	0.1uF	10.00% 16V	
C782	1-107-826-11	CERAMIC CHIP	0.1uF	10.00% 16V	
		< DIODE >			
D781	8-719-988-61	DIODE 1SS355TE-17			
D782	8-719-988-61	DIODE 1SS355TE-17			
D783	8-719-988-61	DIODE 1SS355TE-17			
D784	8-719-988-61	DIODE 1SS355TE-17			
		< JACK >			
J501	1-816-219-11	JACK, HEADPHONE (MIC)			
J781	1-816-219-11	JACK, HEADPHONE (PHONES)			
		< COIL >			
L781	1-410-509-61	INDUCTOR	10uH		
L782	1-408-117-00	INDUCTOR	10uH		
		< RESISTOR >			
R781	1-249-409-11	CARBON	220	5% 1/4W F	
R782	1-249-409-11	CARBON	220	5% 1/4W F	
R783	1-249-409-11	CARBON	220	5% 1/4W F	
R784	1-249-409-11	CARBON	220	5% 1/4W F	
**********					
	1-674-336-12	LOADING BOARD			
		**********			
		< CONNECTOR >			
* CN151	1-568-943-11	PIN, CONNECTOR 5P			
		< SWITCH >			
S1	1-786-203-11	SWITCH, LEVER (SLIDE)(OPEN/CLOSE)			
**********					
	A-4747-880-A	MAIN BOARD, COMPLETE (SP,MY)			
		**********			
	A-4750-065-A	MAIN BOARD, COMPLETE (TH)			
		**********			
		< CAPACITOR >			
C201	1-164-360-11	CERAMIC CHIP	0.1uF	16V	
C205	1-162-968-11	CERAMIC CHIP	0.0047uF	10% 50V	
C206	1-162-968-11	CERAMIC CHIP	0.0047uF	10% 50V	
C207	1-216-864-11	METAL CHIP	0	5% 1/16W	
C214	1-126-947-11	ELECT	47uF	20.00% 25V	
C217	1-164-343-11	CERAMIC CHIP	0.056uF	10.00% 25V	
C218	1-164-343-11	CERAMIC CHIP	0.056uF	10.00% 25V	
C219	1-165-319-11	CERAMIC CHIP	0.1uF	50V	
C220	1-165-319-11	CERAMIC CHIP	0.1uF	50V	
C221	1-164-245-11	CERAMIC CHIP	0.015uF	10.00% 25V	

Ref. No.	Part No.	Description			Remarks
C222	1-164-245-11	CERAMIC CHIP	0.015uF	10.00% 25V	
C223	1-165-621-91	CERAMIC CHIP	0.1uF	50V	
C224	1-165-621-91	CERAMIC CHIP	0.1uF	50V	
C225	1-162-970-11	CERAMIC CHIP	0.01uF	10% 25V	
C227	1-162-968-11	CERAMIC CHIP	0.0047uF	10% 50V	
C231	1-216-864-11	METAL CHIP	0	5% 1/16W	
C233	1-164-245-11	CERAMIC CHIP	0.015uF	10.00% 25V	
C234	1-164-245-11	CERAMIC CHIP	0.015uF	10.00% 25V	
C235	1-162-970-11	CERAMIC CHIP	0.01uF	10% 25V	
C236	1-126-959-11	ELECT	0.47uF	20.00% 50V	
C238	1-162-966-11	CERAMIC CHIP	0.0022uF	10% 50V	
C239	1-126-947-11	ELECT	47uF	20.00% 16V	
C243	1-104-665-11	ELECT	100uF	20.00% 10V	
C244	1-164-816-11	CERAMIC CHIP	220PF	2.00% 50V	
C246	1-104-665-11	ELECT	100uF	20.00% 10V	
C247	1-126-959-11	ELECT	0.47uF	20.00% 50V	(SP,MY)
C247	1-119-819-31	ELECT	0.47uF	20.00% 50V	(TH)
C248	1-164-816-11	CERAMIC CHIP	220PF	2.00% 50V	
C251	1-164-816-11	CERAMIC CHIP	220PF	2.00% 50V	
C252	1-162-927-11	CERAMIC CHIP	100PF	5% 50V	
C253	1-164-816-11	CERAMIC CHIP	220PF	2.00% 50V	
C257	1-126-947-11	ELECT	47uF	20.00% 25V	
C275	1-162-927-11	CERAMIC CHIP	100PF	5% 50V	
C301	1-162-964-11	CERAMIC CHIP	0.001uF	10% 50V	
C302	1-162-964-11	CERAMIC CHIP	0.001uF	10% 50V	
C305	1-130-339-11	FILM	0.0056uF	3.00% 100V	
C306	1-165-501-11	ELECT	220uF	20.00% 10V	
C307	1-162-970-11	CERAMIC CHIP	0.01uF	10% 25V	
C308	1-162-979-11	CERAMIC CHIP	0.0027uF	10.00% 50V	
C309	1-162-979-11	CERAMIC CHIP	0.0027uF	10.00% 50V	
C310	1-162-979-11	CERAMIC CHIP	0.0027uF	10.00% 50V	
C311	1-164-156-11	CERAMIC CHIP	0.1uF	25V	
C312	1-164-156-11	CERAMIC CHIP	0.1uF	25V	
C316	1-162-927-11	CERAMIC CHIP	100PF	5% 50V	
C317	1-165-501-11	ELECT	220uF	20.00% 10V	
C318	1-162-974-11	CERAMIC CHIP	0.01uF	50V	
C319	1-126-967-11	ELECT	47uF	20.00% 50V	
C320	1-162-967-11	CERAMIC CHIP	0.0033uF	10% 50V	
C321	1-162-967-11	CERAMIC CHIP	0.0033uF	10% 50V	
C322	1-126-961-11	ELECT	2.2uF	20.00% 50V	
C323	1-126-961-11	ELECT	2.2uF	20.00% 50V	
C324	1-115-414-11	CERAMIC CHIP	820PF	5.00% 25V	
C325	1-164-174-11	CERAMIC CHIP	0.0082uF	10% 25V	
C326	1-164-174-11	CERAMIC CHIP	0.0082uF	10% 25V	
C327	1-115-414-11	CERAMIC CHIP	820PF	5.00% 25V	
C328	1-162-923-11	CERAMIC CHIP	47PF	5% 50V	
C329	1-162-923-11	CERAMIC CHIP	47PF	5% 50V	
C330	1-124-234-00	ELECT	22uF	20% 16V	
C331	1-124-234-00	ELECT	22uF	20% 16V	
C332	1-115-412-11	CERAMIC CHIP	680PF	5.00% 25V	
C333	1-104-665-11	ELECT	100uF	20.00% 16V	
C334	1-115-412-11	CERAMIC CHIP	680PF	5.00% 25V	
C335	1-164-816-11	CERAMIC CHIP	220PF	2.00% 50V	
C338	1-115-871-11	ELECT	1uF	20.00% 50V	
C339	1-115-871-11	ELECT	1uF	20.00% 50V	
C344	1-126-382-11	ELECT	100uF	20.00% 16V	

Ref. No.	Part No.	Description			Remarks
C351	1-126-794-11	ELECT	4.7uF	20.00%	50V
C352	1-126-956-91	ELECT	0.1uF	20.00%	50V
C353	1-126-956-91	ELECT	0.1uF	20.00%	50V
C354	1-124-902-00	ELECT	0.47uF	20%	50V
C355	1-126-957-11	ELECT	0.22uF	20.00%	50V
C356	1-124-902-00	ELECT	0.47uF	20%	50V
C357	1-126-957-11	ELECT	0.22uF	20.00%	50V
C358	1-126-794-11	ELECT	4.7uF	20.00%	50V
C359	1-164-373-11	CERAMIC CHIP	0.033uF		25V
C360	1-216-864-11	METAL CHIP	0	5%	1/16W
C362	1-164-373-11	CERAMIC CHIP	0.033uF		25V
C363	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C364	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C384	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C385	1-115-416-11	CERAMIC CHIP	0.001uF	5.00%	25V
C387	1-115-416-11	CERAMIC CHIP	0.001uF	5.00%	25V
C397	1-126-382-11	ELECT	100uF	20.00%	16V
C398	1-124-234-00	ELECT	22uF	20%	16V
C399	1-124-234-00	ELECT	22uF	20%	16V
C401	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C402	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C403	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C404	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C405	1-137-420-11	FILM	0.047uF	3.00%	100V
C406	1-137-420-11	FILM	0.047uF	3.00%	100V
C407	1-128-549-11	ELECT	3300uF	20.00%	35V
C408	1-126-953-11	ELECT	2200uF	20.00%	35V
C409	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C412	1-126-947-11	ELECT	47uF	20.00%	25V
C413	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C414	1-126-947-11	ELECT	47uF	20.00%	25V
C416	1-126-947-11	ELECT	47uF	20.00%	25V
C417	1-126-963-11	ELECT	4.7uF	20.00%	50V
C418	1-128-576-11	ELECT	100uF	20.00%	63V
C420	1-126-233-11	ELECT	22uF	20%	50V
C421	1-113-340-11	ELECT	47uF	20.00%	25V
C422	1-113-340-11	ELECT	47uF	20.00%	25V
C424	1-126-382-11	ELECT	100uF	20.00%	10V
C428	1-164-315-11	CERAMIC CHIP	470PF	5.00%	50V
C437	1-113-340-11	ELECT	47uF	20.00%	25V
C438	1-113-340-11	ELECT	47uF	20.00%	25V
C451	1-126-963-11	ELECT	4.7uF	20.00%	50V
C452	1-126-786-11	ELECT	47uF	20.00%	16V
C470	1-136-259-11	FILM	0.1uF	3.00%	100V (TH)
C471	1-136-259-11	FILM	0.1uF	3.00%	100V (TH)
C528	1-107-826-11	CERAMIC CHIP	0.1uF	10.00%	16V
C529	1-115-467-11	CERAMIC CHIP	0.22uF	10.00%	10V
C530	1-115-467-11	CERAMIC CHIP	0.22uF	10.00%	10V
C533	1-107-826-11	CERAMIC CHIP	0.1uF	10.00%	16V
C534	1-126-947-11	ELECT	47uF	20.00%	35V
C535	1-107-826-11	CERAMIC CHIP	0.1uF	10.00%	16V
C536	1-126-964-11	ELECT	10uF	20.00%	50V
C537	1-107-826-11	CERAMIC CHIP	0.1uF	10.00%	16V
C538	1-165-176-11	CERAMIC CHIP	0.047uF	10.00%	16V
C539	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C637	1-216-864-11	METAL CHIP	0	5%	1/16W
C802	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C803	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C804	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C805	1-126-951-11	ELECT	470uF	20.00%	35V
C806	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C807	1-165-621-91	CERAMIC CHIP	0.1uF		50V
C808	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C809	1-126-949-11	ELECT	220uF	20.00%	35V
C810	1-126-934-11	ELECT	220uF	20.00%	10V (SP,MY)
C811	1-107-826-11	CERAMIC CHIP	0.1uF	10.00%	16V
		< CONNECTOR >			
* CN201	1-564-520-11	PLUG, CONNECTOR 5P			
CN302	1-784-784-11	CONNECTOR, FFC 23P			
* CN303	1-770-415-11	CONNECTOR,FFC(LIF(NON-ZIF))11P			
CN304	1-784-733-11	CONNECTOR, FFC 11P			
* CN307	1-564-709-11	PIN, CONNECTOR (SMALL TYPE) 7P			
CN401	1-784-584-11	HOLDER, CABLE (2.5MM PITCH) 7P (TH)			
* CN451	1-564-518-11	PLUG, CONNECTOR 3P			
CN801	1-817-541-11	CONNECTOR 5P			
		< DIODE >			
D201	6-500-335-01	DIODE MC2838			
D202	6-500-335-01	DIODE MC2838			
D203	6-500-334-01	DIODE MC2836			
D204	6-500-334-01	DIODE MC2836			
D205	6-500-335-01	DIODE MC2838			
D206	6-500-334-01	DIODE MC2836			
D207	6-500-335-01	DIODE MC2838			
D208	6-500-335-01	DIODE MC2838			
D209	6-500-335-01	DIODE MC2838			
D302	8-719-947-13	DIODE MTZJ-T-72-4.7B			
D304	8-719-947-13	DIODE MTZJ-T-72-4.7B			
D320	8-719-991-33	DIODE 1SS133T-72			
D402	6-500-335-01	DIODE MC2838			
D404	6-500-376-01	DIODE 1N4003LES			
D405	6-500-378-01	DIODE 1N5402GW(F20)			
D406	6-500-378-01	DIODE 1N5402GW(F20)			
D407	6-500-378-01	DIODE 1N5402GW(F20)			
D408	8-719-200-02	DIODE 1N4003			
D409	8-719-200-02	DIODE 1N4003			
D410	8-719-200-02	DIODE 1N4003			
D411	8-719-150-92	DIODE MTZJ-T-72-33D			
D412	8-719-200-02	DIODE 1N4003			
D414	8-719-991-33	DIODE 1SS133T-72			
D415	8-719-110-09	DIODE MTZJ-T-72-8.2C			
D417	8-719-991-33	DIOD E 1SS133T-72			
D420	8-719-991-33	DIODE 1SS133T-72			
D451	8-719-991-33	DIODE 1SS133T-72			
D452	8-719-991-33	DIODE 1SS133T-72			
D802	8-719-991-33	DIODE 1SS133T-72			
D804	8-719-947-16	DIODE MTZJ-T-72-5.1A			
D805	6-500-334-01	DIODE MC2836			
D807	8-719-109-93	DIODE MTZJ-T-72-6.2B			
D809	8-719-073-92	DIODE RB060L-40TE25			

MAIN

Ref. No.	Part No.	Description			Remarks
		< FERRITE BEAD >			
FB201	1-412-473-21	INDUCTOR	0uH		
FB202	1-410-396-41	FERRITE	0.45uH		
FB301	1-216-864-11	METAL CHIP	0	5%	1/16W
FB302	1-216-864-11	METAL CHIP	0	5%	1/16W
		< IC >			
IC301	6-702-895-01	IC BD3881FV			
IC503	8-759-525-25	IC BU4052BCF-T1			
IC504	6-702-788-01	IC NJM14558MD-TE2			
		< JACK >			
J204	1-774-785-21	JACK, PIN 1P (SUB WOOFER)			
J602	1-793-478-11	JACK, PIN 2P (AUX IN)			
J605	1-537-240-31	TERMINAL BOARD (CHECKER PIN)(SPEAKERS)			
		< JUMPER RESISTOR >			
JR211	1-216-864-11	METAL CHIP	0	5%	1/16W
JR301	1-216-864-11	METAL CHIP	0	5%	1/16W
JR503	1-216-296-11	SHORT CHIP	0		
JR801	1-216-864-11	METAL CHIP	0	5%	1/16W
		< COIL >			
L201	1-456-107-11	COIL, K (MDEC)			
L202	1-456-107-11	COIL, K (MDEC)			
L301	1-456-094-11	COIL, OSC	85kHz BIAS		
L805	1-408-117-00	INDUCTOR	10uH		
L806	1-408-105-00	INDUCTOR	1uH		
L807	1-406-718-11	INDUCTOR	68uH		
L808	1-408-105-00	INDUCTOR	1uH		
L809	1-408-117-00	INDUCTOR	10uH		
		< TRANSISTOR >			
Q201	8-729-230-49	TRANSISTOR	2SC2712-G		
Q203	6-550-294-01	TRANSISTOR	2SB1342		
Q204	6-550-333-01	TRANSISTOR	2SC5343GL		
Q205	6-550-333-01	TRANSISTOR	2SC5343GL		
Q206	6-550-333-01	TRANSISTOR	2SC5343GL		
Q207	8-729-230-49	TRANSISTOR	2SC2712-G		
Q208	8-729-230-49	TRANSISTOR	2SC2712-G		
Q209	8-729-216-22	TRANSISTOR	2SA1162-G		
Q210	8-729-216-22	TRANSISTOR	2SA1162-G		
Q214	8-729-230-49	TRANSISTOR	2SC2712-G		
Q215	8-729-216-22	TRANSISTOR	2SA1162-G		
Q216	8-729-216-22	TRANSISTOR	2SA1162-G		
Q217	8-729-216-22	TRANSISTOR	2SA1162-G		
Q218	6-550-333-01	TRANSISTOR	2SC5343GL		
Q219	6-550-333-01	TRANSISTOR	2SC5343GL		
Q220	6-550-333-01	TRANSISTOR	2SC5343GL		
Q221	6-550-294-01	TRANSISTOR	2SB1342		
Q222	8-729-216-22	TRANSISTOR	2SA1162-G		
Q223	8-729-230-49	TRANSISTOR	2SC2712-G		
Q224	8-729-230-49	TRANSISTOR	2SC2712-G		
Q225	8-729-230-49	TRANSISTOR	2SC2712-G		
Q227	8-729-230-49	TRANSISTOR	2SC2712-G		
Q229	8-729-230-49	TRANSISTOR	2SC2712-G		
Q243	6-550-296-01	TRANSISTOR	2SA1980G		
Q253	6-550-295-01	TRANSISTOR	2SD1933		

Ref. No.	Part No.	Description			Remarks
Q254	6-550-295-01	TRANSISTOR	2SD1933		
Q261	8-729-230-49	TRANSISTOR	2SC2712-G		
Q262	8-729-230-49	TRANSISTOR	2SC2712-G		
Q263	8-729-216-22	TRANSISTOR	2SA1162-G		
Q301	6-550-333-01	TRANSISTOR	2SC5343GL		
Q302	6-550-333-01	TRANSISTOR	2SC5343GL		
Q303	6-550-333-01	TRANSISTOR	2SC5343GL		
Q304	8-729-120-28	TRANSISTOR	2SC3052F-T1-LF		
Q305	8-729-045-62	TRANSISTOR	2SK2158-T2B		
Q306	8-729-027-31	TRANSISTOR	DTA124EKA-T146		
Q307	8-729-045-62	TRANSISTOR	2SK2158-T2B		
Q308	8-729-045-62	TRANSISTOR	2SK2158-T2B		
Q309	8-729-216-22	TRANSISTOR	2SA1162-G		
Q310	8-729-216-22	TRANSISTOR	2SA1162-G		
Q311	8-729-028-83	TRANSISTOR	DTA124EUA-T106		
Q312	8-729-281-59	TRANSISTOR	2SC1815		
Q401	8-729-230-49	TRANSISTOR	2SC2712-G		
Q402	8-729-024-94	TRANSISTOR	2SB1370-EF		
Q403	6-550-333-01	TRANSISTOR	2SC5343GL		
Q405	8-729-230-49	TRANSISTOR	2SC2712-G		
Q406	8-729-120-28	TRANSISTOR	2SC3052F-T1-LF		
Q407	6-550-296-01	TRANSISTOR	2SA1980G		
Q408	8-729-216-22	TRANSISTOR	2SA1162-G		
Q409	8-729-230-49	TRANSISTOR	2SC2712-G		
Q411	8-729-230-49	TRANSISTOR	2SC2712-G		
Q412	8-729-230-49	TRANSISTOR	2SC2712-G		
Q413	6-550-755-01	TRANSISTOR	2SA1979		
Q451	8-729-120-28	TRANSISTOR	2SC3052F-T1-LF		
Q452	8-729-120-28	TRANSISTOR	2SC3052F-T1-LF		
Q453	6-550-344-01	TRANSISTOR	2SC3266GR		
Q454	8-729-120-28	TRANSISTOR	2SC3052F-T1-LF		
Q801	8-729-041-79	TRANSISTOR	2SB1443TV2-Q		
Q802	8-729-120-28	TRANSISTOR	2SC3052F-T1-LF		
Q803	8-729-120-28	TRANSISTOR	2SC3052F-T1-LF		
Q804	8-729-120-28	TRANSISTOR	2SC3052F-T1-LF		
Q805	6-550-344-01	TRANSISTOR	2SC3266GR		
Q806	8-729-041-79	TRANSISTOR	2SB1443TV2-Q		
Q807	8-729-027-55	TRANSISTOR	DTC143EKA-T146		
		< RESISTOR >			
R208	1-216-821-11	METAL CHIP	1K	5%	1/16W
R209	1-216-821-11	METAL CHIP	1K	5%	1/16W
R211	1-216-833-11	METAL CHIP	10K	5%	1/16W
R212	1-216-833-11	METAL CHIP	10K	5%	1/16W
R216	1-249-429-11	CARBON	10K	5%	1/4W
R217	1-249-393-11	CARBON	10	5%	1/4W F
R218	1-249-393-11	CARBON	10	5%	1/4W F
R219	1-216-797-11	METAL CHIP	10	5%	1/16W
R220	1-216-797-11	METAL CHIP	10	5%	1/16W
R221	1-216-847-11	METAL CHIP	150K	5%	1/16W
R222	1-216-847-11	METAL CHIP	150K	5%	1/16W
R224	1-216-832-11	METAL CHIP	8.2K	5%	1/16W
R226	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R227	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R228	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R229	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R230	1-216-830-11	METAL CHIP	5.6K	5%	1/16W
R231	1-216-830-11	METAL CHIP	5.6K	5%	1/16W

Ref. No.	Part No.	Description			Remarks
R232	1-216-837-11	METAL CHIP	22K	5%	1/16W
R233	1-216-837-11	METAL CHIP	22K	5%	1/16W
R234	1-216-841-11	METAL CHIP	47K	5%	1/16W
R235	1-249-417-11	CARBON	1K	5%	1/4W F
R236	1-216-833-11	METAL CHIP	10K	5%	1/16W
R237	1-216-857-11	METAL CHIP	1M	5%	1/16W
R238	1-216-809-11	METAL CHIP	100	5%	1/16W
R239	1-216-821-11	METAL CHIP	1K	5%	1/16W
R242	1-216-821-11	METAL CHIP	1K	5%	1/16W
R244	1-216-837-11	METAL CHIP	22K	5%	1/16W
R248	1-249-417-11	CARBON	1K	5%	1/4W F
R249	1-249-417-11	CARBON	1K	5%	1/4W F
R250	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R251	1-216-833-11	METAL CHIP	10K	5%	1/16W
R252	1-216-818-11	METAL CHIP	560	5%	1/16W
R253	1-216-822-11	METAL CHIP	1.2K	5%	1/16W
R254	1-216-837-11	METAL CHIP	22K	5%	1/16W
R255	1-216-809-11	METAL CHIP	100	5%	1/16W
R256	1-216-809-11	METAL CHIP	100	5%	1/16W
R257	1-249-417-11	CARBON	1K	5%	1/4W F
R258	1-249-417-11	CARBON	1K	5%	1/4W F
R259	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R260	1-216-819-11	METAL CHIP	680	5%	1/16W
R261	1-216-822-11	METAL CHIP	1.2K	5%	1/16W
R262	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R263	1-244-367-81	METAL OXIDE	0.22	5%	1W
R264	1-216-809-11	METAL CHIP	100	5%	1/16W
R265	1-216-821-11	METAL CHIP	1K	5%	1/16W
R266	1-216-822-11	METAL CHIP	1.2K	5%	1/16W
R267	1-216-835-11	METAL CHIP	15K	5%	1/16W
R268	1-216-821-11	METAL CHIP	1K	5%	1/16W
R269	1-216-809-11	METAL CHIP	100	5%	1/16W
R270	1-216-833-11	METAL CHIP	10K	5%	1/16W
R271	1-216-804-11	METAL CHIP	39	5%	1/16W
R272	1-244-367-81	METAL OXIDE	0.22	5%	1W
R273	1-216-804-11	METAL CHIP	39	5%	1/16W
R274	1-216-835-11	METAL CHIP	15K	5%	1/16W
R275	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R276	1-244-367-81	METAL OXIDE	0.22	5%	1W
R277	1-216-822-11	METAL CHIP	1.2K	5%	1/16W
R278	1-216-821-11	METAL CHIP	1K	5%	1/16W
R279	1-216-809-11	METAL CHIP	100	5%	1/16W
R280	1-216-841-11	METAL CHIP	47K	5%	1/16W
R281	1-216-833-11	METAL CHIP	10K	5%	1/16W
R282	1-216-804-11	METAL CHIP	39	5%	1/16W
R283	1-216-804-11	METAL CHIP	39	5%	1/16W
R284	1-244-367-81	METAL OXIDE	0.22	5%	1W
R285	1-216-845-11	METAL CHIP	100K	5%	1/16W
R286	1-216-845-11	METAL CHIP	100K	5%	1/16W
R287	1-216-833-11	METAL CHIP	10K	5%	1/16W
R288	1-216-841-11	METAL CHIP	47K	5%	1/16W
R289	1-216-833-11	METAL CHIP	10K	5%	1/16W
R290	1-216-833-11	METAL CHIP	10K	5%	1/16W
R294	1-216-809-11	METAL CHIP	100	5%	1/16W
R296	1-216-841-11	METAL CHIP	47K	5%	1/16W
R297	1-216-821-11	METAL CHIP	1K	5%	1/16W
R298	1-216-809-11	METAL CHIP	100	5%	1/16W
R301	1-216-842-11	METAL CHIP	56K	5%	1/16W
R302	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R303	1-216-845-11	METAL CHIP	100K	5%	1/16W
R304	1-249-425-11	CARBON	4.7K	5%	1/4W F
R305	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R306	1-216-836-11	METAL CHIP	18K	5%	1/16W
R307	1-216-836-11	METAL CHIP	18K	5%	1/16W
R308	1-249-392-11	CARBON	8.2	5%	1/4W F
R309	1-216-828-11	METAL CHIP	3.9K	5%	1/16W
R311	1-216-828-11	METAL CHIP	3.9K	5%	1/16W
R312	1-249-425-11	CARBON	4.7K	5%	1/4W F
R315	1-249-424-11	CARBON	3.9K	5%	1/4W F
R316	1-216-857-11	METAL CHIP	1M	5%	1/16W
R317	1-216-840-11	METAL CHIP	39K	5%	1/16W
R318	1-216-817-11	METAL CHIP	470	5%	1/16W
R321	1-216-810-11	METAL CHIP	120	5%	1/16W
R322	1-216-810-11	METAL CHIP	120	5%	1/16W
R323	1-216-852-11	METAL CHIP	390K	5%	1/16W
R324	1-216-822-11	METAL CHIP	1.2K	5%	1/16W
R325	1-216-836-11	METAL CHIP	18K	5%	1/16W
R326	1-216-836-11	METAL CHIP	18K	5%	1/16W
R327	1-216-822-11	METAL CHIP	1.2K	5%	1/16W
R328	1-216-852-11	METAL CHIP	390K	5%	1/16W
R330	1-216-833-11	METAL CHIP	10K	5%	1/16W
R333	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R334	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R336	1-249-409-11	CARBON	220	5%	1/4W F
R337	1-249-413-11	CARBON	470	5%	1/4W F
R338	1-249-413-11	CARBON	470	5%	1/4W F
R339	1-247-807-31	CARBON	100	5%	1/4W
R340	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R342	1-216-833-11	METAL CHIP	10K	5%	1/16W
R343	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R344	1-216-833-11	METAL CHIP	10K	5%	1/16W
R345	1-216-843-11	METAL CHIP	68K	5%	1/16W
R346	1-216-827-11	METAL CHIP	3.3K	5%	1/16W
R347	1-216-843-11	METAL CHIP	68K	5%	1/16W
R348	1-216-827-11	METAL CHIP	3.3K	5%	1/16W
R349	1-216-821-11	METAL CHIP	1K	5%	1/16W
R350	1-216-833-11	METAL CHIP	10K	5%	1/16W
R351	1-216-821-11	METAL CHIP	1K	5%	1/16W
R352	1-216-833-11	METAL CHIP	10K	5%	1/16W
R353	1-216-824-11	METAL CHIP	1.8K	5%	1/16W
R354	1-216-837-11	METAL CHIP	22K	5%	1/16W
R355	1-216-824-11	METAL CHIP	1.8K	5%	1/16W
R356	1-216-837-11	METAL CHIP	22K	5%	1/16W
R357	1-216-826-11	METAL CHIP	2.7K	5%	1/16W
R358	1-218-867-11	METAL CHIP	6.8K	5%	1/10W
R359	1-216-826-11	METAL CHIP	2.7K	5%	1/16W
R360	1-218-867-11	METAL CHIP	6.8K	5%	1/10W
R361	1-216-821-11	METAL CHIP	1K	5%	1/16W
R362	1-216-828-11	METAL CHIP	3.9K	5%	1/16W
R363	1-216-844-11	METAL CHIP	82K	5%	1/16W
R364	1-216-844-11	METAL CHIP	82K	5%	1/16W
R365	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R366	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R367	1-216-824-11	METAL CHIP	1.8K	5%	1/16W

MAIN | MIC/ECHO

Ref. No.	Part No.	Description			Remarks
R368	1-216-828-11	METAL CHIP	3.9K	5%	1/16W
R369	1-216-821-11	METAL CHIP	1K	5%	1/16W
R370	1-216-835-11	METAL CHIP	15K	5%	1/16W
R372	1-216-824-11	METAL CHIP	1.8K	5%	1/16W
R373	1-216-820-11	METAL CHIP	820	5%	1/16W
R374	1-216-820-11	METAL CHIP	820	5%	1/16W
R377	1-216-838-11	METAL CHIP	27K	5%	1/16W
R378	1-216-838-11	METAL CHIP	27K	5%	1/16W
R389	1-216-840-11	METAL CHIP	39K	5%	1/16W
R390	1-216-817-11	METAL CHIP	470	5%	1/16W
R391	1-216-789-11	METAL CHIP	2.2	5%	1/16W
R398	1-216-809-11	METAL CHIP	100	5%	1/16W
R399	1-216-815-11	METAL CHIP	330	5%	1/16W
R402	1-216-802-11	METAL CHIP	27	5%	1/10W
R403	1-216-838-11	METAL CHIP	27K	5%	1/16W
R404	1-216-838-11	METAL CHIP	27K	5%	1/16W
R405	1-218-446-11	METAL CHIP	1	5%	1/10W
R406	1-249-381-11	CARBON	1	5%	1/4W F
R407	1-218-446-11	METAL CHIP	1	5%	1/10W
R408	1-218-446-11	METAL CHIP	1	5%	1/10W
R409	1-249-430-11	CARBON	12K	5%	1/4W
R412	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R413	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R414	1-216-817-11	METAL CHIP	470	5%	1/16W
R415	1-216-841-11	METAL CHIP	47K	5%	1/16W
R416	1-216-807-11	METAL CHIP	68	5%	1/16W
R417	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R418	1-216-827-11	METAL CHIP	3.3K	5%	1/16W
R420	1-216-821-11	METAL CHIP	1K	5%	1/16W
R421	1-216-833-11	METAL CHIP	10K	5%	1/16W
R422	1-216-813-11	METAL CHIP	220	5%	1/16W
R423	1-216-817-11	METAL CHIP	470	5%	1/16W
R424	1-216-847-11	METAL CHIP	150K	5%	1/16W
R427	1-216-833-11	METAL CHIP	10K	5%	1/16W
R429	1-216-817-11	METAL CHIP	470	5%	1/16W
R432	1-216-821-11	METAL CHIP	1K	5%	1/16W
R433	1-216-845-11	METAL CHIP	100K	5%	1/16W
R434	1-216-833-11	METAL CHIP	10K	5%	1/16W
R435	1-216-841-11	METAL CHIP	47K	5%	1/16W
R436	1-216-797-11	METAL CHIP	10	5%	1/16W
R437	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R438	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R440	1-216-845-11	METAL CHIP	100K	5%	1/16W
R445	1-216-833-11	METAL CHIP	10K	5%	1/16W
R451	1-216-833-11	METAL CHIP	10K	5%	1/16W
R452	1-216-833-11	METAL CHIP	10K	5%	1/16W
R454	1-216-845-11	METAL CHIP	100K	5%	1/16W
R455	1-216-845-11	METAL CHIP	100K	5%	1/16W
R456	1-216-836-11	METAL CHIP	18K	5%	1/16W
R457	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R458	1-216-833-11	METAL CHIP	10K	5%	1/16W
R459	1-249-388-11	CARBON	3.9	5%	1/6W F
R460	1-216-821-11	METAL CHIP	1K	5%	1/16W
R482	1-218-867-11	METAL CHIP	6.8K	5%	1/10W
R498	1-216-857-11	METAL CHIP	1M	5%	1/16W
R529	1-216-837-11	METAL CHIP	22K	5%	1/16W
R530	1-216-837-11	METAL CHIP	22K	5%	1/16W
R531	1-249-425-11	CARBON	4.7K	5%	1/4W F
R532	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R533	1-216-857-11	METAL CHIP	1M	5%	1/16W
R534	1-216-857-11	METAL CHIP	1M	5%	1/16W
R535	1-216-833-11	METAL CHIP	10K	5%	1/16W
R536	1-216-841-11	METAL CHIP	47K	5%	1/16W
R537	1-216-841-11	METAL CHIP	47K	5%	1/16W
R538	1-216-837-11	METAL CHIP	22K	5%	1/16W
R540	1-216-837-11	METAL CHIP	22K	5%	1/16W
R541	1-216-837-11	METAL CHIP	22K	5%	1/16W
R542	1-249-433-11	CARBON	22K	5%	1/4W
R543	1-216-837-11	METAL CHIP	22K	5%	1/16W
R544	1-216-837-11	METAL CHIP	22K	5%	1/16W
R545	1-216-837-11	METAL CHIP	22K	5%	1/16W
R802	1-216-817-11	METAL CHIP	470	5%	1/16W
R803	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R811	1-216-817-11	METAL CHIP	470	5%	1/16W
R812	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R813	1-216-821-11	METAL CHIP	1K	5%	1/16W
R814	1-216-833-11	METAL CHIP	10K	5%	1/16W
R815	1-216-837-11	METAL CHIP	22K	5%	1/16W
R817	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R818	1-216-821-11	METAL CHIP	1K	5%	1/16W
R819	1-216-821-11	METAL CHIP	1K	5%	1/16W
R820	1-216-817-11	METAL CHIP	470	5%	1/16W
R821	1-216-817-11	METAL CHIP	470	5%	1/16W
R822	1-216-821-11	METAL CHIP	1K	5%	1/16W
R823	1-216-821-11	METAL CHIP	1K	5%	1/16W
R824	1-216-821-11	METAL CHIP	1K	5%	1/16W

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A-4747-883-A MIC/ECHO BOARD, COMPLETE

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< CAPACITOR >

C501	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C502	1-126-957-11	ELECT	0.22uF	20.00%	50V
C503	1-126-964-11	ELECT	10uF	20.00%	50V
C504	1-126-947-11	ELECT	47uF	20.00%	25V
C505	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V
C506	1-126-947-11	ELECT	47uF	20.00%	25V
C507	1-162-925-11	CERAMIC CHIP	68PF	5.00%	50V
C508	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V
C509	1-126-964-11	ELECT	10uF	20.00%	50V
C510	1-126-956-91	ELECT	0.1uF	20.00%	50V
C511	1-126-947-11	ELECT	47uF	20.00%	25V
C512	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C513	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C514	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C515	1-164-217-11	CERAMIC CHIP	150PF	5.00%	50V
C516	1-164-217-11	CERAMIC CHIP	150PF	5.00%	50V
C517	1-126-960-11	ELECT	1uF	20.00%	50V
C518	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C519	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C520	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C521	1-124-252-00	ELECT	0.33uF	20%	50V
C522	1-126-947-11	ELECT	47uF	20.00%	25V
C523	1-126-959-11	ELECT	0.47uF	20.00%	50V
C524	1-107-826-11	CERAMIC CHIP	0.1uF	10.00%	16V
C525	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V

Ref. No.	Part No.	Description			Remarks
C526	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C527	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C528	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C529	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C554	1-115-414-11	CERAMIC CHIP	820PF	5.00%	25V
		< CONNECTOR >			
* CN501	1-564-705-11	PIN, CONNECTOR (SMALL TYPE) 3P			
* CN502	1-564-706-11	PIN, CONNECTOR (SMALL TYPE) 4P			
CN504	1-784-766-11	CONNECTOR, FFC 5P			
		< DIODE >			
D501	8-719-109-85	DIODE MTZJ-T-72-5.1B			
		< IC >			
IC501	6-702-788-01	IC NJM14558MD-TE2			
IC502	6-702-896-01	IC BU9262AFS			
		< JUMPER RESISTOR >			
JR501	1-216-864-11	METAL CHIP	0	5%	1/16W
JR502	1-216-864-11	METAL CHIP	0	5%	1/16W
		< COIL >			
L501	1-469-186-51	INDUCTOR	82uH		
		< TRANSISTOR >			
Q501	8-729-045-62	TRANSISTOR	2SK2158-T2B		
Q508	8-729-120-28	TRANSISTOR	2SC3052F-T1-LF		
		< RESISTOR >			
R501	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R502	1-216-845-11	METAL CHIP	100K	5%	1/16W
R503	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R504	1-216-845-11	METAL CHIP	100K	5%	1/16W
R505	1-247-807-31	CARBON	100	5%	1/4W
R506	1-216-850-11	METAL CHIP	270K	5%	1/16W
R507	1-218-867-11	METAL CHIP	6.8K	5%	1/10W
R508	1-216-837-11	METAL CHIP	22K	5%	1/16W
R509	1-216-821-11	METAL CHIP	1K	5%	1/16W
R510	1-216-826-11	METAL CHIP	2.7K	5%	1/16W
R511	1-216-839-11	METAL CHIP	33K	5%	1/16W
R512	1-216-821-11	METAL CHIP	1K	5%	1/16W
R513	1-216-809-11	METAL CHIP	100	5%	1/16W
R514	1-216-847-11	METAL CHIP	150K	5%	1/16W
R515	1-216-851-11	METAL CHIP	330K	5%	1/16W
R516	1-249-407-11	CARBON	150	5%	1/4W F
R517	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R518	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R519	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R526	1-216-837-11	METAL CHIP	22K	5%	1/16W
R527	1-216-857-11	METAL CHIP	1M	5%	1/16W
R528	1-216-815-11	METAL CHIP	330	5%	1/16W

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Ref. No.	Part No.	Description			Remarks
	1-689-560-11	PT BOARD			
		*********			
		< CAPACITOR >			
C801	1-126-942-61	ELECT	1000uF	20.00%	25V
		< CONNECTOR >			
CN202	1-564-321-00	PIN, CONNECTOR(3.96MM PITCH)2P			
		< DIODE >			
D801	8-719-991-33	DIODE 1SS133T-72			
D803	8-719-991-33	DIODE 1SS133T-72			
D806	8-719-991-33	DIODE 1SS133T-72			
D808	8-719-991-33	DIODE 1SS133T-72			
		< TRANSFORMER >			
⚠ PT802	1-439-976-11	TRANSFORMER, POWER (SUB)			
		< RELAY >			
⚠ RY801	1-755-496-11	RELAY			
		< SWITCH >			
⚠ S801	1-786-408-11	SW, SL 1-2-3 SWS2301 (AC VOLTAGE)(SP,MY)			

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	A-4747-885-A	V-OUT BOARD, COMPLETE			
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		< CAPACITOR >			
C771	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C772	1-107-826-11	CERAMIC CHIP	0.1uF	10.00%	16V
C773	1-107-826-11	CERAMIC CHIP	0.1uF	10.00%	16V
		< CONNECTOR >			
* CN771	1-564-706-11	PIN, CONNECTOR (SMALL TYPE) 4P			
		< DIODE >			
D771	8-719-800-76	DIODE 1SS133T-91			
D772	8-719-800-76	DIODE 1SS133T-91			
		< FERRITE BEAD >			
FB772	1-500-245-11	FERRITE	0uH		
FB773	1-500-245-11	FERRITE	0uH		
		< JACK >			
J771	1-774-227-11	JACK, PIN 1P (VIDEO OUT)			
		< RESISTOR >			
R771	1-218-285-11	METAL CHIP	75	5%	1/10W
		< SWITCH >			
S771	1-571-589-11	SWITCH, SLIDE (NTSC-AUTO-PAL)			

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The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

VCD

Ref. No.	Part No.	Description			Remarks
	A-4734-927-A	VCD BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C302	1-124-261-00	ELECT	10uF	20%	50V
C308	1-126-176-11	ELECT	220uF	20%	10V
C309	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C310	1-124-584-00	ELECT	100uF	20%	10V
C311	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C608	1-126-176-11	ELECT	220uF	20%	10V
C609	1-126-176-11	ELECT	220uF	20%	10V
C610	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C611	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C612	1-216-864-11	METAL CHIP	0	5%	1/16W
C703	1-164-346-11	CERAMIC CHIP	1uF		16V
C704	1-164-346-11	CERAMIC CHIP	1uF		16V
C705	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C706	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C707	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C708	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C709	1-124-584-00	ELECT	100uF	20%	10V
C710	1-124-589-11	ELECT	47uF	20%	16V
C711	1-162-925-11	CERAMIC CHIP	68PF	5.00%	50V
C712	1-162-925-11	CERAMIC CHIP	68PF	5.00%	50V
C713	1-162-925-11	CERAMIC CHIP	68PF	5.00%	50V
C714	1-162-925-11	CERAMIC CHIP	68PF	5.00%	50V
C715	1-164-346-11	CERAMIC CHIP	1uF		16V
C716	1-164-346-11	CERAMIC CHIP	1uF		16V
C717	1-164-346-11	CERAMIC CHIP	1uF		16V
C718	1-164-346-11	CERAMIC CHIP	1uF		16V
C719	1-164-346-11	CERAMIC CHIP	1uF		16V
C720	1-164-346-11	CERAMIC CHIP	1uF		16V
C721	1-164-346-11	CERAMIC CHIP	1uF		16V
C722	1-164-346-11	CERAMIC CHIP	1uF		16V
C723	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C801	1-124-589-11	ELECT	47uF	20%	16V
C802	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C803	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C804	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C805	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C806	1-124-589-11	ELECT	47uF	20%	16V
C807	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C808	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C810	1-115-156-11	CERAMIC CHIP	1uF		10V
C813	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C814	1-124-589-11	ELECT	47uF	20%	16V
C815	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C816	1-124-584-00	ELECT	100uF	20%	10V
C817	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C818	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C819	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C820	1-162-917-11	CERAMIC CHIP	15PF	5%	50V
C821	1-162-916-11	CERAMIC CHIP	12PF	5%	50V
C822	1-124-589-11	ELECT	47uF	20%	16V
C823	1-124-261-00	ELECT	10uF	20%	50V
C824	1-115-156-11	CERAMIC CHIP	1uF		10V
C825	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C826	1-124-589-11	ELECT	47uF	20%	16V
C827	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C830	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C831	1-126-961-11	ELECT	2.2uF	20.00%	50V
C834	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C835	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C836	1-124-589-11	ELECT	47uF	20%	16V
C837	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C838	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C839	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C843	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C844	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C846	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C847	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C853	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C854	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C855	1-162-913-11	CERAMIC CHIP	8PF	0.50PF	50V
C856	1-162-913-11	CERAMIC CHIP	8PF	0.50PF	50V
C857	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C858	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C859	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C862	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C863	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C902	1-162-957-11	CERAMIC CHIP	220PF	5%	50V
C903	1-164-362-11	CERAMIC CHIP	470PF	5.00%	50V
C904	1-126-935-11	ELECT	470uF	20.00%	6.3V
C905	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C909	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C923	1-162-974-11	CERAMIC CHIP	0.01uF		50V
		< CONNECTOR >			
CN801	1-779-542-21	CONNECTOR, FFC(LIF(NON-ZIF))5P			
CN802	1-779-560-21	CONNECTOR,FFC(LIF(NON-ZIF))23P			
CN803	1-779-546-11	CONNECTOR, FFC(LIF(NON-ZIF))9P			
* CN804	1-564-720-11	PIN, CONNECTOR (SMALL TYPE) 4P			
CN806	1-779-548-21	CONNECTOR,FFC(LIF(NON-ZIF))11P			
		< DIODE >			
D301	8-719-083-58	DIODE UDZSTE-173.9B			
D701	8-719-069-56	DIODE UDZSTE-176.2B			
D801	8-719-083-58	DIODE UDZSTE-173.9B			
D803	8-719-988-61	DIODE 1SS355TE-17			
D805	8-719-988-61	DIODE 1SS355TE-17			
		< GROUND TERMINAL >			
EP601	1-537-770-21	TERMINAL BOARD, GROUND			
		< FERRITE BEAD >			
FB801	1-216-295-91	SHORT CHIP	0		
FB802	1-216-295-91	SHORT CHIP	0		
FB803	1-216-295-91	SHORT CHIP	0		
FB811	1-216-295-91	SHORT CHIP	0		
FB813	1-216-295-91	SHORT CHIP	0		
FB814	1-216-295-91	SHORT CHIP	0		
FB815	1-216-295-91	SHORT CHIP	0		
FB816	1-216-295-91	SHORT CHIP	0		
FB817	1-216-295-91	SHORT CHIP	0		
		< IC >			
IC701	6-702-945-01	IC NJM14558V-TE2			
IC801	6-702-944-01	IC ES3880FM			

Ref. No.	Part No.	Description			Remarks
IC802	8-759-832-55	IC ES3889			
IC803	6-803-452-01	IC HT27C020(DO)			
IC804	6-703-603-01	IC GLT44016-30TC			
IC805	6-701-985-01	IC BH2220FVM-TR			
		< JUMPER RESISTOR >			
JR802	1-216-864-11	METAL CHIP	0	5%	1/16W
JR803	1-216-864-11	METAL CHIP	0	5%	1/16W
JR804	1-216-296-11	SHORT CHIP	0		
		< COIL >			
L801	1-414-410-21	INDUCTOR	10uH		
L802	1-414-410-21	INDUCTOR	10uH		
L901	1-408-962-21	INDUCTOR	2.2uH		
		< TRANSISTOR >			
Q309	6-550-344-01	TRANSISTOR	2SC3266GR		
Q801	6-550-344-01	TRANSISTOR	2SC3266GR		
Q802	8-729-200-72	TRANSISTOR	2SC2712L-TE85L		
Q901	8-729-216-22	TRANSISTOR	2SA1162-G		
		< RESISTOR >			
R304	1-216-146-00	RES-CHIP	6.8	5%	1/8W
R305	1-216-174-00	RES-CHIP	100	5%	1/8W
R306	1-216-296-11	SHORT CHIP	0		
R341	1-216-184-00	RES-CHIP	270	5%	1/8W
R701	1-216-809-11	METAL CHIP	100	5%	1/16W
R702	1-216-809-11	METAL CHIP	100	5%	1/16W
R703	1-216-813-11	METAL CHIP	220	5%	1/16W
R704	1-216-813-11	METAL CHIP	220	5%	1/16W
R705	1-216-813-11	METAL CHIP	220	5%	1/16W
R706	1-216-813-11	METAL CHIP	220	5%	1/16W
R707	1-216-180-00	RES-CHIP	180	5%	1/8W
R708	1-216-833-11	METAL CHIP	10K	5%	1/16W
R709	1-216-833-11	METAL CHIP	10K	5%	1/16W
R710	1-216-837-11	METAL CHIP	22K	5%	1/16W
R711	1-216-837-11	METAL CHIP	22K	5%	1/16W
R713	1-216-837-11	METAL CHIP	22K	5%	1/16W
R714	1-216-837-11	METAL CHIP	22K	5%	1/16W
R715	1-216-838-11	METAL CHIP	27K	5%	1/16W
R716	1-216-838-11	METAL CHIP	27K	5%	1/16W
R717	1-216-838-11	METAL CHIP	27K	5%	1/16W
R718	1-216-838-11	METAL CHIP	27K	5%	1/16W
R719	1-218-917-11	METAL CHIP	820K	5%	1/10W
R720	1-218-917-11	METAL CHIP	820K	5%	1/10W
R721	1-218-917-11	METAL CHIP	820K	5%	1/10W
R722	1-218-917-11	METAL CHIP	820K	5%	1/10W
R801	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R802	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R804	1-216-821-11	METAL CHIP	1K	5%	1/16W
R808	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R809	1-216-809-11	METAL CHIP	100	5%	1/16W
R810	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R811	1-216-813-11	METAL CHIP	220	5%	1/16W
R812	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R813	1-216-845-11	METAL CHIP	100K	5%	1/16W
R814	1-216-809-11	METAL CHIP	100	5%	1/16W

Ref. No.	Part No.	Description			Remarks
R815	1-216-809-11	METAL CHIP	100	5%	1/16W
R816	1-216-809-11	METAL CHIP	100	5%	1/16W
R817	1-216-809-11	METAL CHIP	100	5%	1/16W
R818	1-216-156-00	RES-CHIP	18	5%	1/8W
R819	1-216-833-11	METAL CHIP	10K	5%	1/16W
R820	1-216-833-11	METAL CHIP	10K	5%	1/16W
R821	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R822	1-216-174-00	RES-CHIP	100	5%	1/8W
R823	1-216-156-00	RES-CHIP	18	5%	1/8W
R824	1-216-819-11	METAL CHIP	680	5%	1/16W
R825	1-216-827-11	METAL CHIP	3.3K	5%	1/16W
R830	1-216-833-11	METAL CHIP	10K	5%	1/16W
R831	1-216-833-11	METAL CHIP	10K	5%	1/16W
R832	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R833	1-216-808-11	METAL CHIP	82	5%	1/16W
R841	1-216-809-11	METAL CHIP	100	5%	1/16W
R842	1-216-809-11	METAL CHIP	100	5%	1/16W
R843	1-216-809-11	METAL CHIP	100	5%	1/16W
R844	1-216-809-11	METAL CHIP	100	5%	1/16W
R849	1-216-809-11	METAL CHIP	100	5%	1/16W
R850	1-216-864-11	METAL CHIP	0	5%	1/16W
R851	1-216-864-11	METAL CHIP	0	5%	1/16W
R852	1-216-864-11	METAL CHIP	0	5%	1/16W
R853	1-216-832-11	METAL CHIP	8.2K	5%	1/16W
R901	1-218-285-11	METAL CHIP	75	5%	1/10W
R902	1-216-813-11	METAL CHIP	220	5%	1/16W
R903	1-216-864-11	METAL CHIP	0	5%	1/16W
R906	1-216-821-11	METAL CHIP	1K	5%	1/16W
R909	1-216-821-11	METAL CHIP	1K	5%	1/16W
R921	1-216-809-11	METAL CHIP	100	5%	1/16W
R922	1-216-809-11	METAL CHIP	100	5%	1/16W
R923	1-216-809-11	METAL CHIP	100	5%	1/16W
R925	1-216-864-11	METAL CHIP	0	5%	1/16W
R926	1-216-864-11	METAL CHIP	0	5%	1/16W
R927	1-216-864-11	METAL CHIP	0	5%	1/16W
R930	1-216-809-11	METAL CHIP	100	5%	1/16W
R931	1-216-809-11	METAL CHIP	100	5%	1/16W
R932	1-216-809-11	METAL CHIP	100	5%	1/16W
R933	1-216-809-11	METAL CHIP	100	5%	1/16W
R934	1-216-809-11	METAL CHIP	100	5%	1/16W
R935	1-216-809-11	METAL CHIP	100	5%	1/16W
R936	1-216-809-11	METAL CHIP	100	5%	1/16W
R937	1-216-809-11	METAL CHIP	100	5%	1/16W
R938	1-216-826-11	METAL CHIP	2.7K	5%	1/16W
R939	1-216-847-11	METAL CHIP	150K	5%	1/16W
R940	1-216-843-11	METAL CHIP	68K	5%	1/16W
R941	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R942	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R943	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R944	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R945	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R946	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R947	1-216-809-11	METAL CHIP	100	5%	1/16W
R951	1-216-864-11	METAL CHIP	0	5%	1/16W
		< VIBRATOR >			
X801	1-795-630-11	VIBRATOR, CRYSTAL (27 MHz)			

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Ref. No.	Part No.	Description	Remarks
		MISCELLANEOUS	
		**********	
3	1-693-620-11	TUNER (FM/AM)	
5	1-400-285-11	F-BEAD, E2515MRT	
6	1-828-004-11	WIRE (FLAT TYPE) (23 CORE)	
7	1-763-697-21	DC FAN	
65	1-796-351-51	MECHANISM, SINGLE CASSETTE	
102	1-400-285-11	F-BEAD, E2515MRT	
107	1-823-669-11	WIRE (FLAT TYPE) (11 CORE)	
⚠109	1-769-744-52	CORD, POWER (SP,MY)	
⚠109	1-824-818-11	CORD, POWER (WITH CONNECTOR) (TH)	
202	1-782-817-11	WIRE (FLAT TYPE) (16 CORE)	
⚠203	A-4735-189-A	BU-30(61)ASSY	
⚠PT801	1-443-096-11	TRANSFORMER, POWER	

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

MEMO

REVISION HISTORY

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Also, clicking the version at the upper right on the revised page allows you to jump to the next revised page.

Ver.	Date	Description of Revision
1.0	2003.08	New

SX-LFAV500

SERVICE MANUAL

E Model

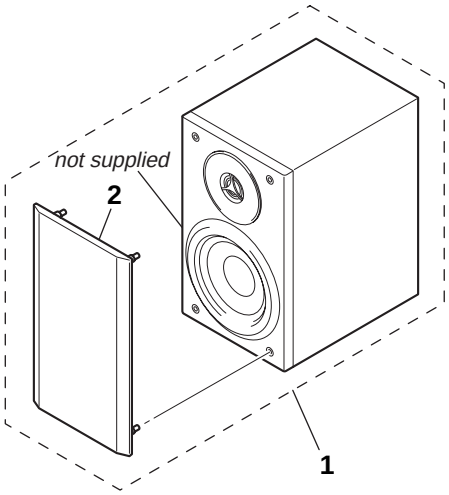
Ver 1.0 2003. 08

- SX-LFAV500 is the speaker system in XR-FAV500.

SPECIFICATIONS

Speakers system	2 way, bass-reflex type (magnetic shielded)
Speaker units	Woofer: 120 mm cone type Tweeter: 30 mm balance dome type
Nominal impedance	6 Ω
Dimensions (w/h/d)	Approx. 155 × 250 × 218 mm
Mass	Approx. 2.3 kg net per speaker

EXPLODED VIEWS AND PARTS LIST



Ref. No.	Part No.	Description
1	A-4737-490-A	MAIN UNIT ASSY
2	4-247-789-11	NET, GRILLE

SPEAKER SYSTEM

9-961-146-01
2003H1678-1
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